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ABSTRACT

The purpose of this manual is to suggest adaptable procedures and materials that can be used by Alaska vocational educators to evaluate their automotive mechanic programs systematically. Section 1 is an introduction to the manual and to the evaluation process. The remaining six sections represent major tasks or activities that should be accomplished during an evaluation. These major tasks are (1) Implementation (or preliminary activities), (2) Student Locator (keeping track of current addresses for student follow-up study), (3) Follow-up Surveys (collecting evaluative information from former students and their employers), (4) Student Data (documenting evaluative information from follow-up surveys), (5) Student Achievement (keeping track of student attainment during the program), and (6) Program Review (documenting all evaluative data in tables--provided in the appendixes). Within each section (or within subsections) evaluation activities are presented as steps and substeps. Appendixes include a review summary form, suggested (and alternate) data displays for the program status handbook, a student follow-up survey form, an employer survey form, and Statewide Evaluation System for Vocational Education: Guidelines. (YLB)

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A MODEL FOR EVALUATING VOCATIONAL AUTOMOBILE MECHANICS PROGRAMS

by

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June 1979

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ACKNOWLEDGEMENT

An earlier version of this manual was field tested in Kenai Central High School, Anchorage Career Center and the Juneau-Douglas High School. Appreciation is extended to the Auto Mechanics Instructors, their respective students and the administrations of the respective schools and school districts for their assistance and cooperation during this field test. The results of the field test provided the basis for some major modifications in the model, which are reflected herein. Unfortunately resources were too limited to test the revised version of this manual and the recommended evaluation procedures. Appreciation is extended to the staff of the Alaska State Department of Education for their reviews of this model.

The evaluative methodology suggested in this manual is based on a model proposed in Review and Decision Making for Occupational Education Programs in Oregon that was developed by Gary W. Sorenson and Warren N. Suzuki. Professor Sorenson is the Director of the Manpower Studies Institute, and Professor Suzuki is on the faculty of the Vocational-Technical Education Division at Oregon State University. Parts of the manual were also based on Evaluation of Occupational Exploration Programs that was developed by Professors Suzuki and Larry J. Kenneke in 1977. Professor Kenneke is the Assistant Dean of Services of the School of Education at Oregon State University.

SECTION I

INTRODUCTION

Vocational educators have promised the public and its representatives many things. The public is now questioning whether these promises are being fulfilled. Legislators are asking whether or not vocational education is making any difference to student performance in the labor market. Taxpayers are becoming increasingly reluctant to provide funds for programs that cannot explicitly demonstrate their effectiveness.

Vocational educators have voiced similar concerns. They have been committed to providing occupational education and training "...which is of high quality, which is realistic in the light of actual and anticipated opportunities for gainful employment, and which is suited to students' needs, interests, and ability to benefit from such training" (Section 101, Public Law 94-482, Title II). Hard decisions are being made on whether to continue, modify, or terminate occupational education programs. However, information and processes for systematic decision-making and review have all too often been found lacking by those charged with the responsibility for making those hard decisions.

Purpose of this Manual

The purpose of this manual is to suggest adaptable procedures and materials that can be used by dedicated vocational educators to evaluate their automotive mechanic programs systematically. For the purposes of this manual "evaluation" shall mean the process of systematically collecting and documenting useful information, then using this information in making decisions on whether to continue an automotive mechanic program as it currently exists, to modify it, or to terminate the program.

It should be noted that the evaluative methodology suggested in this manual could result in information that is needed to prepare parts of federal reports required by the Vocational Education Admendments of 1976 (P.L. 94-482, Title II). For the information to be useful for federal reporting, terms such as "disadvantaged," "early leavers," and "vocational education" must be used consistently by all automotive mechanic programs reporting information to the Alaska Department of Education.

Delimitation

As discussed later, information necessary for determining whether to continue, modify, or terminate an automotive mechanic program should be concerned with two things: the extent to which students are actually becoming employable and employed (outcomes), and the means by which they are becoming employable and employed (process).

Although extensive research and development has been conducted on program evaluation, most of it has focused on processes and not outcomes. Therefore, this manual will focus on collecting and documenting information on student outcomes.

Assumptions

Three assumptions underlie the evaluative methodology suggested in this manual. The first assumption is that an automotive mechanic program is never static. It is always responding to changes in the labor market, client pool

from which it draws its students, and the resources available to it. Therefore, the evaluation of an automotive mechanic program should also be conducted continuously. Whereas program planning is concerned with specifying intended outcomes (student achievements) and means for students to attain those outcomes, program evaluation focuses on the extent to which students actually attain these outcomes and how the program is conducted in fact.

The second assumption is that systematic evaluations of automotive mechanic programs require the active participation of all persons involved with the program i.e., students, instructors, vocational administrators, school and district administrators, advisory committees, employers, state specialists. Because no one group or person can be held solely responsible for conducting an effective and efficient program it seems appropriate that all those involved should be concerned with determining whether or not a program is efficient and effective.

The third assumption is that all those responsible for collecting, providing, documenting, or using evaluative information believe that program evaluation is a necessary component of any automotive mechanic program. Evaluation is not only conducted in response to external demands such as federal and state reports, but is critical to assuring internally that programs are viable. That is, vocational education should be enabling its clients to become employable and employed at minimum cost to its clients and taxpayers.

The Model

Program evaluation as discussed in this manual is concerned with whether to continue an automotive mechanic program as it currently exists, to modify the program, or to terminate the program.

Taken as a whole, the task may appear formidable due to the many things that must be considered. However, the decision-making and review process can be broken down into manageable parts (Figure 1).

The first thing to consider is whether or not a program should be continued as it currently exists. To make this decision, three major questions should be asked. They are:

1) Is the program effective?

2) Are the costs incurred from conducting the program acceptable?

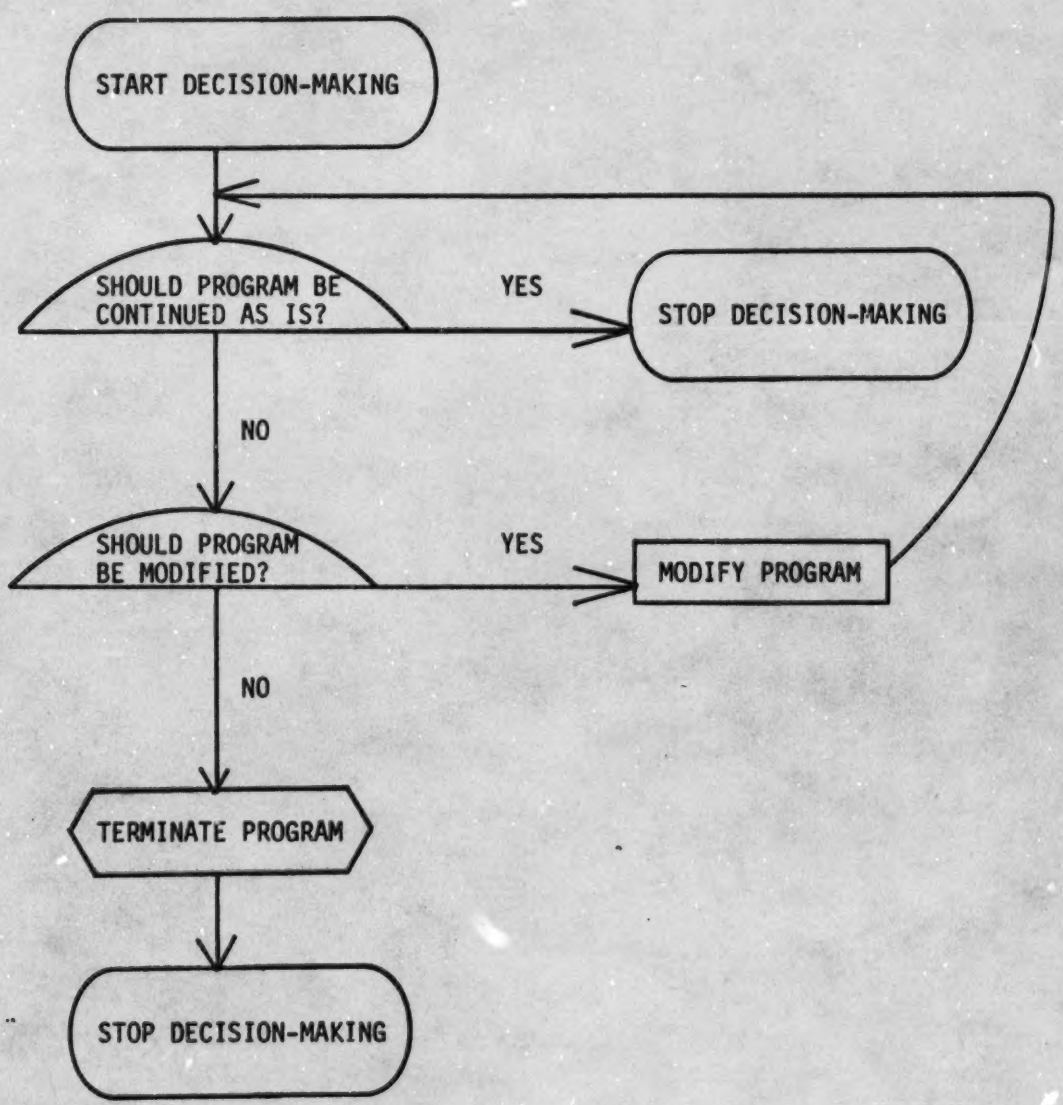
3) Is the program essential to the community, the school, and the students?

If the answers to all three questions are affirmative, then the program should continue to operate as it currently exists. This does not mean, however, that refinements should not be pursued by the program's staff; it does suggest that major overhauling is not necessary at this time. If, on the other hand, the three questions cannot be answered positively, then consideration should be given to whether or not to modify the program.

Finally, if a program is not effective and a decision is made not to modify the program, then the program should be terminated. In summary, the decision to continue, modify, or terminate a program can be viewed as two decisions: 1) whether or not to continue an occupational education program, then 2) whether or not to modify the program if it should not be continued as it currently is. Termination of a program, therefore, is a consequence of deciding neither to continue nor to modify a program.

FIGURE 1

REVIEW AND DECISION-MAKING PROCESS



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To facilitate the decision-making and review processes, subquestions can be derived from the major questions (e.g., is the program effective?). This partitioning of large, global questions into ever decreasing parts will enable decision-makers to consider fewer variables for any given question. Finally, the use of criteria for deciding whether or not a question should be answered affirmatively or negatively could further facilitate the decision-making process.

Appendix A contains a list of questions and criteria. Figure 2 summarizes the relationship that should exist among major questions and subquestions, and how the major questions are associated with the decision to continue, modify, or terminate an occupational education program. Appendix B suggests a minimum of displays or tables that provide information for answering subquestions and deciding the extent to which criteria have been met. Tables 1 through 6 provide general information on the status of a program. Many of them present summaries contained in tables located in other parts of the handbook. The remainder of the tables in the handbook are arranged around major questions and subquestions.

Alternative displays to some tables contained in the handbook are shown in Appendix C. All displays should be considered as proposed formats for information. It may be necessary to modify or expand them. As an example, Table 2 more than likely does not contain enough space to list all courses that should be identified; however, it suggests a format for documenting this information.

Using This Manual

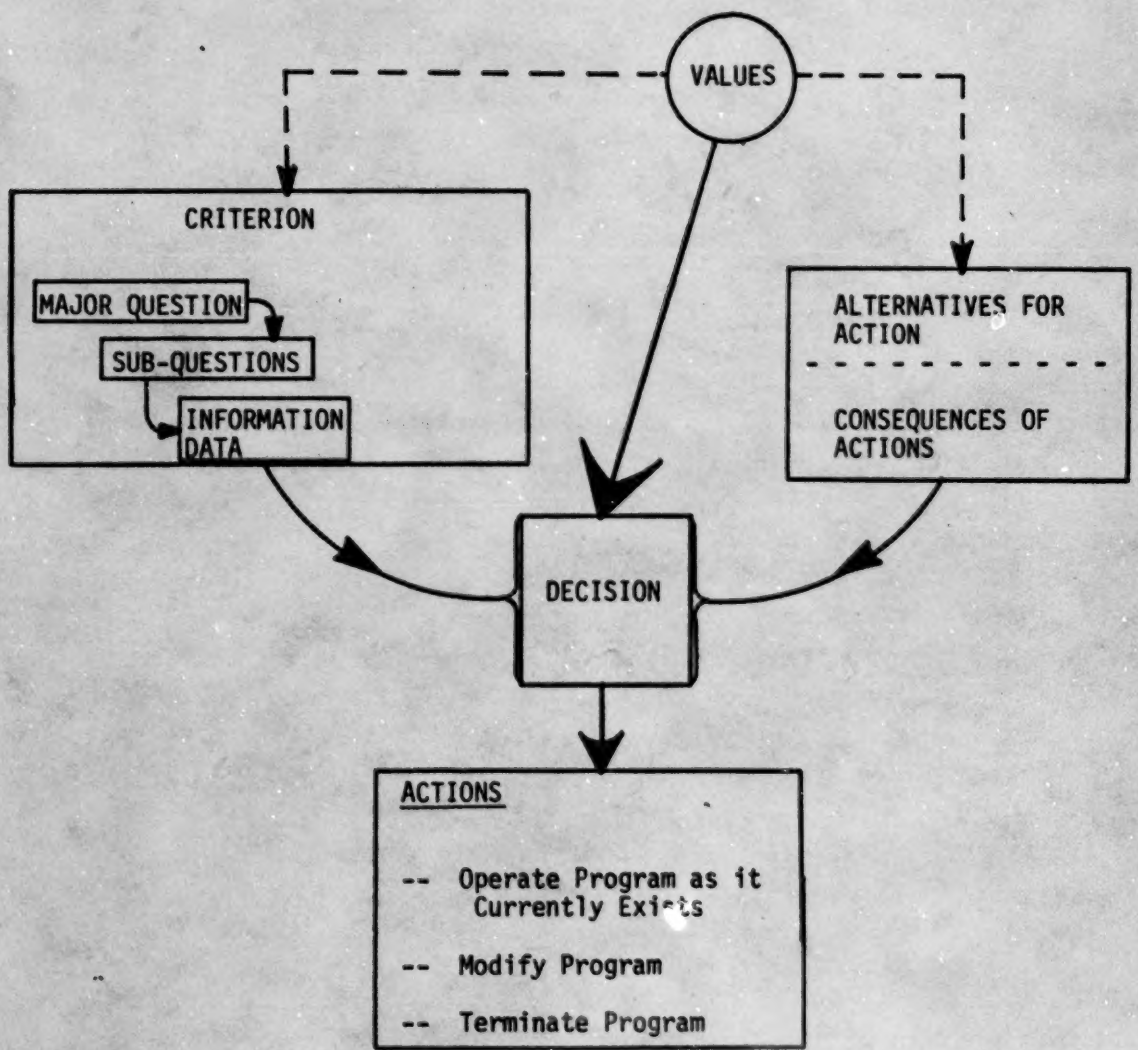
This manual is divided into sections and subsections. Sections are designated by Roman numerals (e.g., I, II, etc.) and represent major tasks or activities that should be accomplished during an evaluation of an Automotive Mechanic Program. These major tasks are:

Section	Title	Task
II	Implementation	Preliminary activities
III	Student Locator	Keeping track of current addresses for student follow-up study.
IV	Follow-up Surveys	Collecting evaluative information from former students and their employers.
V	Student Data	Documenting evaluative information from follow-up surveys.
VI	Student Achievement	Keeping track of student attainment during the program.
VII	Program Review	Documenting all evaluative data in tables in Appendix B.

Within each section or subsection, evaluation activities are presented as steps and substeps. Steps (e.g., 1.0,2.0, etc.) are usually given in the order in which they should be used. Substeps (1.1, 2.31, 3.2.1.a, etc.) however, either provide explanatory information on the major steps or procedures which should be followed in order presented.

FIGURE 2

RELATIONSHIP BETWEEN
CRITERION QUESTIONS AND DECISIONS



It is highly recommended that one person be designated as a "coordinator" for the evaluations conducted in the school or district. This person should have a position that is relatively high in the organization, such as a vocational director, an assistant dean, a coordinator for institutional planning and evaluation, or a curriculum coordinator. The responsibilities of this individual could be as follows:

1) Spearhead the implementation of the overall methodology.

2) Assist programs and departments to implement the procedures for data collection and documentation.

3) Coordinate the acquisition of information on enrollment, achievement and costs from institutional units outside of the programs and departments, such as the district's business manager.

4) Assist occupational education programs with the use of information contained in the tables and displays in Appendix B.

Implied in these responsibilities is the intent that program reviews and decision-making should start at the "grassroots"--the occupational education programs. The role of the coordinator is one of facilitation and not one of actually collecting and documenting information and doing reviews.

SECTION II

IMPLEMENTATION

The procedures described below suggest steps that the "Coordination of the Evaluation", as recommended in Section I, should be taking in implementing the program review and decision-making process. The coordinator is encouraged to adopt the procedures for data collection and documentation to address unique circumstances of each institution, school or district in Alaska. The procedures contain key decisions that must be made in order to implement the process effectively.

1.0 Identify the persons to be involved in the decision whether or not to continue an occupational education program as it currently exists, to modify that existing program, or to terminate the program.

1.1 Many individuals may participate in the decision-making process at different times and for different reasons. Those having legitimate authority to make decisions may be members of the Board of Education, the superintendent, vocational education director, principal, etc. Many others may make recommendations on program continuation, modification, and termination.

1.2 Consideration should be given to the roles of advisory committees in the review process and decision-making.

1.3 The use of third-party or external evaluators should be considered. There are two primary reasons for retaining third-party or external evaluators. These are: 1) to

enhance the credibility of the program review and 2) to acquire assistance with the program review if additional expertise is needed and/or existing staff members do not have sufficient time for collecting and documenting information. The "evaluation coordinator" proposed in Section I could serve as an external evaluator to an occupational education program if the information is for use within the institution only.

2.0 Review the major questions, subquestions, and criteria given in Appendix A. Decide whether or not each question, subquestion, and criterion should be used in deciding whether to continue, modify, or terminate an occupational education program. If you eliminate inappropriate questions, subquestions or criteria, follow through the remainder of the model to adjust other sections accordingly.

2.1 A major question is designated by a letter (e.g., A, B, etc.). A subquestion is designated by a "whole" number (e.g., 1.0, 2.0, etc.). A criterion is designated by a "fractional" or "decimal" number (e.g., 1.1, 1.2, 4.3, etc.).

2.2 Each set of criteria should be used to answer the subquestions with which they are associated (e.g., findings on criteria 1.1 and 1.2 should permit you to answer subquestion 1.0). In turn each set of subquestions should be used to answer the major question with which they are associated (e.g., subquestions 1.0, 2.0, 3.0 and 4.0 should permit you to answer major question A).

3.0 Specify the subquestion and criteria for major question C, "Is

the program essential?" There may be a variety of reasons for continuing an automotive mechanic program regardless of its cost or effectiveness. These reasons or realities could be related to social impact, political considerations, institutional tradition, legislative mandates, and/or long range plans of the institution. These then should be made known to all who are involved and affected by the decisions made on whether to continue, modify, or terminate programs.

4.0 Assign a weight to each appropriate criterion. The criteria to which weights can be assigned are 1.1 through 4.3 and 6.1. If a criterion is valued highly, assign a large number to it (e.g. 90%, 500, etc.). If a criterion in not valued highly, assign a small number to it (e.g. 0, 10%, etc.). It should be noted that for criterion 6.1 which is concerned with the cost for conducting the program, the weighting should be higher for a lower overall cost.

5.0 Review the information displays contained in Appendix B. Decide which displays will be used to determine whether the criteria and subquestions have been met. Information displays that could be used may already exist in Appendix B or C, may be a modification of a display suggested in Appendix B or C, may be a table, chart, or list that is already prepared by the institution, and/or additional displays.

6.0 Determine who will be responsible to collect and provide information for the selected information displays. Information for the displays could be collected and/or provided by different sources in the institution. For example, the busi-

ness office may be responsible for providing information on expenditures, the attendance clerk may be responsible for enrollment data, the program director or coordinator may be the most appropriate person to conduct follow-up studies.

7.0 Establish a schedule of evaluation activities.

7.1 Specify when each evaluation activity will be conducted. A suggested schedule is given in Figure 3. This schedule is based on a two-year cycle for data collection and documentation. At the end of each two-year cycle, the evaluative information is reviewed and compared to the criteria shown in Appendix A.

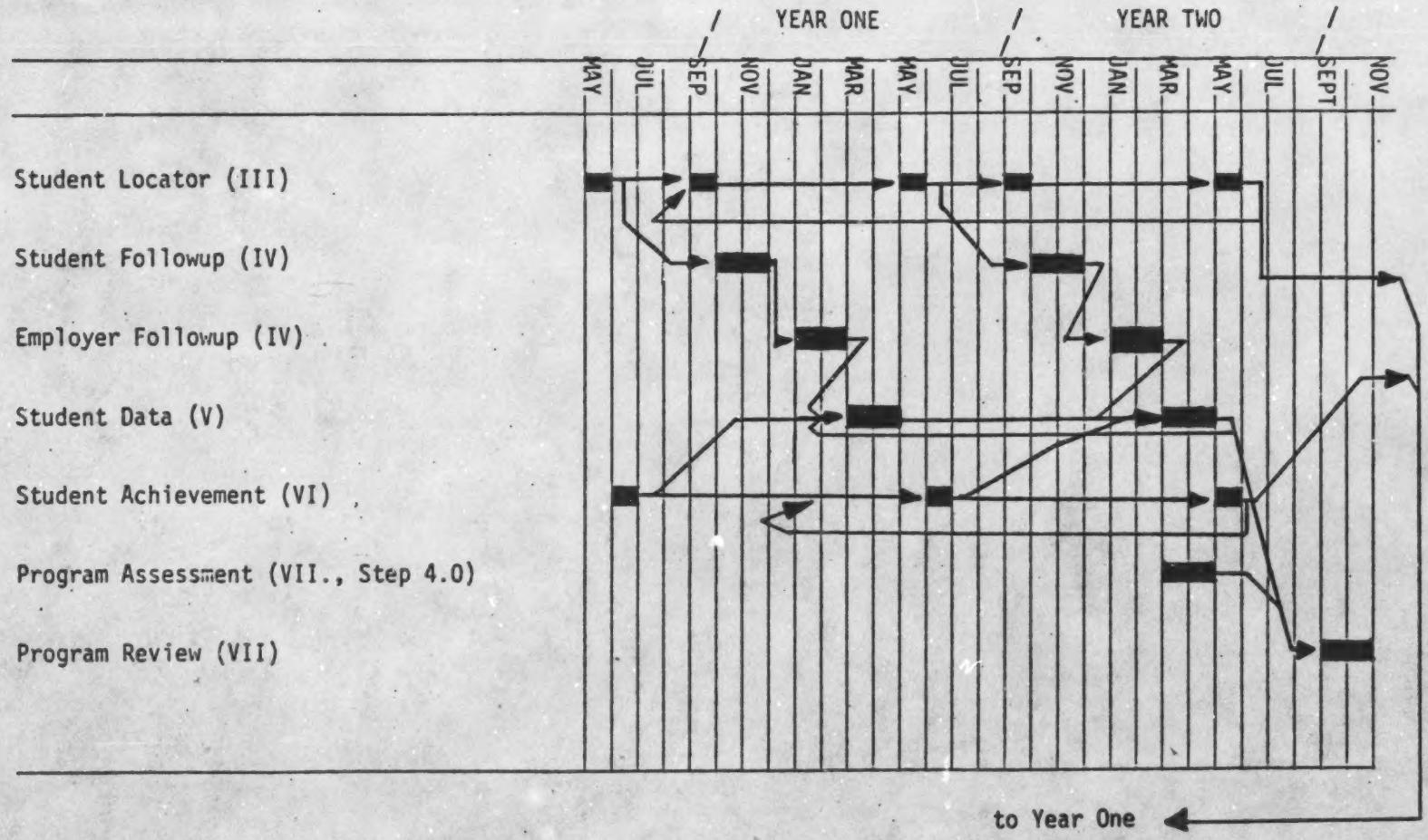
7.2 Make copies of the schedule and distribute them to all persons responsible for collecting and documenting information and for decision making.

8.0 Review the remainder of this manual. Make any necessary modifications to the procedures or materials. Reproduce and distribute the materials to persons who will be responsible for collecting and providing information for the displays and compiling the "Program Status" handbook.

9.0 Conduct instructional sessions for those responsible for collecting and providing information for the displays and compiling the displays for displays selected from Appendix B or C, or otherwise modified and developed.

FIGURE 3

SCHEDULE OF EVALUATION ACTIVITIES



SECTION III

STUDENT LOCATOR

A major source of data, as called for in this model, is drawn from past students of the auto mechanics program. The importance of this section of the model is dependent upon the decisions made through the process recommended in Section II. The more the decisions to be made are to be based upon what happens to former students, the more important the systematic steps called for in this portion of the model.

The major problem faced by many followup studies of former students is locating the students and, once located, encouraging them to respond to the survey. The ability to acquire usable information from any group, whether an entire class or a sample of former students in a particular class, is critical to the accuracy of the findings of a survey. Those who do not wish to provide information or have not had an opportunity to provide information, because those conducting the follow-up survey could not find them, often provide quite different information than those who do respond. Accuracy depends upon student data from both groups, those who readily respond and those more reluctant or resistant to providing data.

On one extreme, the rapport that instructors establish with their students is sufficient for keeping abreast of where their students work and/or live once they leave the program. However, this is more feasible if the number of students is quite small, the students tend not to move or change jobs, and/or there are relatively few early leavers. At the other extreme, those conducting surveys are able to locate former students through local and long-distance telephone directories and calls to relatives and friends of the former students. This method could be quite expensive both in terms of personnel time and long-distance fees.

The procedures suggested below represent a middle ground. Addresses of auto mechanics students are collected and updated continuously through a systematic survey. Students are periodically asked to provide their current addresses, and the addresses of persons who are most likely to know where they are. This information is then filed so that it can be recalled when a follow-up survey is conducted. A system for coding the information is suggested to facilitate the recall of subjects for a survey. The procedures suggested in this manual for conducting follow-up surveys correspond to the information collection and coding suggested below.

1.0 Have students in every course in the Automotive Mechanic Program complete a Student Locator form during September and May of each academic year.

1.1 Prepare a Student Locator form. The instrument should have items concerned with at least the current address of a parent or guardian and another person who should usually know where the student is living. Figure 4 is an example of a Student Locator form. This form could be printed on 5" x 8" cards for ease in handling.

1.2 Inform students of the purpose of the Student Locator form and encourage them to participate in the follow-up studies when they receive questions in the future regarding this program. <u>This is a critical task</u>. Students need to be convinced that the information gained from follow-up studies is important and will make a difference as to how the program is conducted. An example of how the current program was changed based upon previous follow-up information can be helpful in convincing the student of the commitment to consider their input seriously. Any disinterest shown by the person administering the student locator form could result in lower response rates to mailed questionnaires. Figure 5 is an

example of instructions that could be read to students.

1.3 Distribute Student Locator forms to students. Ask that they complete the card even though they may have previously done so.

1.4 Collect the completed forms and thank the students for their assistance.

2.0 Set up and then maintain a file of Student Locator forms.

2.1 Setting up a file.

2.1.1 Designate a location for storing Student Locator forms. Information contained on Student Locator forms should be treated confidentially. As an example, completed forms should be kept in a secure place, such as a locked filing cabinet. The completed forms should also be kept in a different location from follow-up forms returned by former students or their employers.

2.1.2 A minimum of five categories should be established for the Student Locator forms. These categories are as follows:

a. Program Completers. Former students who have completed all requirements for entry into occupations intended by the program.

b. Early Leavers. Persons who have not completed all requirements of the program, are no longer enrolled in the program and have not enrolled in another occupational education program.

c. Follow-up. Persons who are currently participating in a follow-up study.

d. Non-completers. Persons who have not completed all

Figure 4

Year In ___/___ ___

Year Out ___/___ ___ I.D. No._____

STUDENT LOCATOR
(Please Print)

Name:_____
(Last) (First) (Middle Initial)

Date this form is completed_____

1. What is your current mailing address:

_____
(Street No.) (Street) (Apartment or Box No.)

_____
(City) (State) (ZIP Code)

2. What is the name, address and telephone number of someone other than your parent(s) or guardian(s) who will most likely always know where you are living?

Name:_____

Address:_____

_____ ZIP_____

Telephone Number:___(___)_____

What is the relationship of this person to you?

_____ Sister or Brother ____Friend

_____ Other Relative _____
(specify)

3. What is the name and address of your parent(s) or guardian(s):

Name:_____

Address:_____

_____ ZIP_____

Telephone Number:___(___)_____

Figure 5

SAMPLE INSTRUCTIONS FOR ADMINISTERING STUDENT LOCATOR FORMS

Step 1. Wait until all students are in the classroom or laboratory.

Step 2. Introduce yourself.

Step 3. Read the following directions to the students:

THE FACULTY OF _____ SCHOOL STRONGLY BELIEVE THAT THE AUTOMOTIVE MECHANIC PROGRAM CAN BE REFINED AND IMPROVED. TO DO SO REQUIRES ACCURATE AND MEANINGFUL INFORMATION. YOU ARE A PRIMARY SOURCE OF IMPORTANT INFORMATION THAT WE NEED.

SOME TIME IN THE FUTURE, AFTER YOU LEAVE SCHOOL, WE WOULD LIKE TO ASK YOU TO TELL US HOW WELL THIS AUTOMOTIVE MECHANICS PROGRAM WORKED FOR YOU. THEREFORE, WE NEED TO KNOW HOW WE CAN GET IN TOUCH WITH YOU AFTER YOU ARE NO LONGER ENROLLED IN THIS PROGRAM. I WOULD APPRECIATE YOUR COMPLETION OF THIS STUDENT LOCATOR FORM (hold up a copy of the form). YOU MAY HAVE ALREADY COMPLETED A COPY OF THIS FORM IN ANOTHER CLASS THIS TERM OR DURING A PREVIOUS TERM. EVEN IF YOU HAVE, I WOULD STILL APPRECIATE YOUR COMPLETING A COPY OF THIS FORM AGAIN -- IT WILL HELP WITH OUR FILING.

YOU DO NOT HAVE TO GIVE ANY OF THE INFORMATION ASKED FOR ON THIS FORM. HOWEVER, ANY INFORMATION THAT YOU PROVIDE TO US WILL BE KEPT IN STRICTEST CONFIDENCE. YOU WILL BE HELPING US MAKE THIS A BETTER PROGRAM FOR YOUR FELLOW STUDENTS AND FUTURE STUDENTS.

Step 4. Pass out Student Locator forms.

Step 5. Read the following to the students:

PLEASE PRINT. YOU MAY WANT TO PAY PARTICULAR ATTENTION TO NUMBER 2. BE SURE THAT THE PERSON WOULD NOT MOVE WITH YOU SHOULD YOU CHANGE YOUR ADDRESS OR IS NOT LIKELY TO MOVE WITHIN THE NEXT TWO YEARS. DO YOU HAVE ANY QUESTIONS? (Respond to any questions.) IF THERE ARE NO FURTHER QUESTIONS, PLEASE COMPLETE THE FORM.

requirements for entry into an occupation intended by the program, but have enrolled in another occupational education program.

e. Active. Persons still enrolled in the program.

2.1.3 Place the completed Student Locator forms in alphabetical order. Eliminate duplicate forms, discarding the earlier dated form.

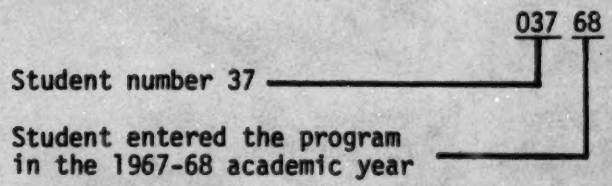
2.1.4 Assign a unique identification number to each person.

a. You may wish to use the identification number assigned each student by the school, if any. If not, estimate the maximum number of "new" students who will enroll in the program during any given year. Designate the number of digits that could be in a student number. As an example, the student number will have two digits if the estimated number of students will be between 10 and 99 during any given year, three digits if the estimated number will be between 100 and 999, etc. Therefore, the first student number assigned in a three-digit code would be "001", the tenth person would be "010", and the one-hundredth person would be "100".

b. Assign a two digit "year" code which indicates the academic year in which an individual

student enrolls in the program for the first time (e.g. "80" for the 1979-80 academic year). This information could be useful when identifying those students who are potential early leavers.

c. As an example, identification number "037 68" would mean the following:



2.1.5 File all Student Locator cards in the "Active" category (see 2.1.2 above).

2.2 Updating a file. After filing the initial set of Student Locator forms that were completed by students, update the file by doing the following with each subsequent set of forms:

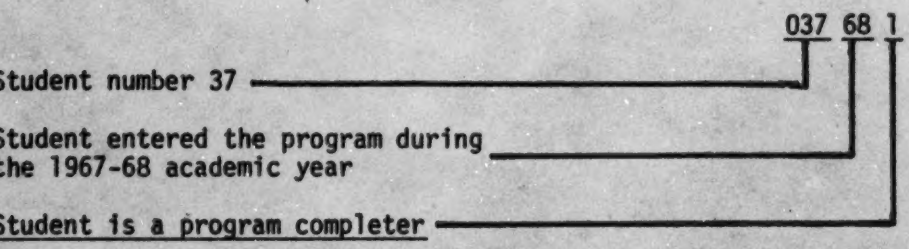
2.2.1 Place the new set of forms in alphabetical order. Make sure you have one Student Locator card for each student in the class. For any student refusing to complete a card, place the student's name on a card and note the student's choice to not complete a form.

2.2.2 If the "new" name is <u>not</u> a duplicate of a previous card, assign an identification number (see 2.1.4, above) to the person and insert the card alphabetically in the "Active" file.

2.2.3 If the "new" name is a duplicate of one already in the "Active" file, compare the information on the cards. If the information is different, write the

identification number appearing on the "original" card that the student completed. This will facilitate the identification of program early leavers. If the "new" card is for a student having completed a card earlier, retain the most recent copy and discard the earlier card.

3.0 Note on the Student Locator card when a student completes all requirements for entry into occupations intended by the program. This may be done by adding a number to the identification number assigned during step 2.1.4 above. Using the example given in that step, identification number "037 68 1" would mean:



In a similar manner, when the student leaves the program prior to completing the program requirements, their status should be noted by the following code numbers:

0 = Program Non-completer

1 = Program Completer

2 = Early Leaver; Approximately 76 to 99 percent of requirements have been met.

3 = Early Leaver; Approximately 51 to 75 percent of requirements have been met.

4 = Early Leaver; Approximately 26 to 50 percent of requirements have been met.

5 = Early Leaver; Approximately 0 to 25 percent of requirements have been met.

4.0 As soon as the system has been worked out for assigning identification

numbers to students, place a set of directions for following the system in the Student Locator file. Also place a card in the front of the file on which is designated what each digit or series of digits of the identification number means.

SECTION IV

FOLLOW-UP SURVEYS

The need to know how well occupational education programs have prepared their students to successfully enter the world of work is well established. This is done in a variety of ways, such as measuring student achievement, assuring the instructional objectives are relevant to occupational needs, and using representatives of business and industry to assure that instruction is appropriate for occupations. However, the ultimate test of how well occupational education programs have prepared their students to function in the world of work is to determine how well they actually perform on the job. The primary means for determining this is a follow-up study.

The procedures suggested below are one means for conducting a follow-up survey of former students and their employers. These procedures are correlated with the use of the Student Locator form suggested in Section III. The evaluator should note that there are variations to these procedures or alternate procedures that are as efficient as those suggested below. It may be necessary to use these alternatives or variations to meet local needs. Therefore, it is suggested that the procedures outlined below and their alternatives should be continuously evaluated as they are used, with an eye towards increasing institutional capability to collect accurate and comprehensive information.

The purpose of collecting information from former students is to determine their employment history, their expressed ability to perform the job in an auto mechanics job or similar job, who their employer/supervisor is and to obtain their recommendations for any change in the school program they experienced. In surveying the employer, data is collected to determine the former students' ability to perform the auto mechanic's job or similar job and to obtain recommendations for educational experiences needed by the student. The two surveys collect infor-

mation that can be useful in cross checking perceptions between the employer and employee.

In general, there are four parts to collecting data from former students. The procedures in each part and their locations are as follows:

1. Determining the general survey strategy (Step 1.0)
2. Determining from whom data will be collected (Steps 2.0 and 3.0)
3. Preparing materials for the follow-up survey (Step 4.0)
4. Collecting information (Step 5.0)

Procedures for conducting a follow-up of employers of employed program completers are given in Step 5.0.

1.0 Select the general strategy that will be used to follow-up former students and employers. The three general strategies are: (a) mailed questionnaire, (b) personal interview, and (c) telephone interview. Combinations of these general strategies could also be used. When selecting a strategy, the following factors should be considered:

1.1 Amount of information. More information can generally be collected through personal and telephone interviews than mailed questionnaires.

1.2 Number of participants. Given the same amount of resources, more people may be polled through mailed questionnaires than through interviews. In general, the larger the number of respondents to the survey, the greater the accuracy of the information.

1.3 Confirmation of information. Interviewing will permit the asking of clarifying questions. This may increase the accuracy of the information that is collected. However, caution must be used in the interview process so the person interviewing doesn't lead the respondent to answer toward a bias of the interviewer.

1.4 Percentage of respondents. The response rate to a survey, whether

mail or interview, will affect the accuracy of the information collected. The response rate to mailed questionnaires is usually quite low, although there are a few exceptions. The use of second and third mailings to those who do not initially respond will tend to increase the response rate of mail surveys. The percentage of respondents to telephone and personal interviews will be dependent on the amount of perseverance and resources that the school is willing to use to pursue potential respondents.

1.5 Employer survey. If an employer survey will be conducted in conjunction with the student follow-up survey, it may be possible to interview each former student and his/her supervisor during the same visit.

2.0 Identify the former students who will participate in the follow-up study.

2.1 Remove the Student Locator forms from the "Active" category.

2.1.1 Select out the forms for each student that has completed all requirements for entry into occupations for which the program was designed, i.e., a "program completer" as far as the program is concerned. Use the records that the program has on the student or transcripts kept by the college's registrar.

2.1.2 Return the Student Locator forms for all persons who are still enrolled in the program to the "Active" category.

2.1.3 It may be desirable to determine how far the student progressed through the program who did not complete all requirements for entry in intended occupations and are no longer enrolled in the program, i.e., an "early leaver" as far as the program is concerned.

2.1.4 Finally, it may be useful to determine which of the early leavers have enrolled in another occupational preparation program in the same or different school. Technically, these persons are not considered "early leavers" and their Student Locator forms should be filed in the "Non-completer" category.

2.1.5 Designate the status of former students on their Student Locator forms by adding a code to their identification numbers (see Step 3.0, Section III).

2.2 Determine specifically which former students should participate in the follow-up study.

2.2.1 Normally an attempt should be made to acquire information from all except the "active" students identified in Step 2.0 above, if: (1) there are more than 50 persons in the group or (2) you decided in Step 1.0, above, to collect information through interviews. In any case, you should attempt to collect information from at least 30 persons. To select a sample, use a table of random numbers utilizing the individual student number from the student locator file number (see Step 2.1.4.a in Section IV) or do the following:

a. Stack all Student Locator forms in the group in numerical order by the individual student identification number.

b. Randomly select any form in the stack. Count down seven forms and pull that form from the stack. This is the first person in the sample.

c. Count down seven more forms and pull that form. Repeat this process until you have pulled the desired number of forms. When you get to the bottom of the stack, continue counting at the top of the stack.

3.0 Prepare the instrument for data collection from former students.

3.1 Use an instrument that has been developed by your school or the one proposed in Appendix D.

3.1.1 If the school's instrument is used, it should not be longer than one sheet of paper printed on two sides. A long questionnaire may tend to discourage former students from responding.

3.1.2 For interviewing, format the questions so that they are in the order that they will most likely be asked. The format should also permit the interviewer to note respondents' answers quickly and preferably without having to refer to a separate sheet of paper containing codes for possible answers. You may wish to try out the form by interviewing a few students currently in the program.

3.2 Reproduce materials for a mail survey of former students.

3.2.1 Duplicate the questionnaire on colored paper. Light green and orange appear to encourage students. Beige and sand are also popular. The reproduction should look "professionally" done; the use of spirit duplication or mimeograph is discouraged. If a second or third mailing is considered to those who do not respond to the first mailing, print at least 50 percent more questionnaires than the number of former students being surveyed.

3.2.2 Duplicate a cover letter for transmitting the mail survey. Figure 6 is an example of a cover letter. If possible, each letter should be individually signed. A different cover letter may be appropriate for a second mailing. The reproduction of the letter(s) should look "professionally" done, and as much like the original as possible.

4.0 Collect follow-up information from former students. This may be done by mail or interview.

4.1 Mail questionnaires to former students (as selected in Step 2.2 of Section IV).

4.1.1 Prepare envelopes for mailing. Include the following in each envelope:

a. Cover letter

b. A copy of the instrument with the individual student identification number for the former student typed in the appropriate blank.

c. A self-addressed and stamped envelope for returning the questionnaire.

d. Consider including some type of incentive in the envelope, such as a pencil. Research seems to indicate that an incentive, regardless of what it is, tends to increase the response rate of mail surveys.

NOTE: Be sure to affix the proper postage to both envelopes. A "Postage Due" notice is "murder" on a response rate.

4.1.2 Mail the questionnaires so that the addresses will more than likely receive them during the first of the week. Avoid mailing immediately before or after holidays.

4.1.3 If there is a second mailing of questionnaires, identify those who did not respond to the first mailing using the individual student identification number on the Student Locator file for the group. Mail the second questionnaire approximately ten (10) working days after the first mailing. As a variation, a reminder printed on postcards may be used as the second mailing,

then a questionnaire sent during a third mailing ten days after sending the postcards.

NOTE: To maintain the confidentiality of information provided by former students, keep Student Locator forms and completed questionnaires separated.

4.1.4 Call a small sample of non-respondents if the response rate to the mailed questionnaires is low (e.g. below 60 percent). Determine if the non-respondents provide significantly different information, especially on their current employment status (item 2.1 in the survey form suggested in Appendix D), than those who responded to the mailed questionnaire. If the information is different, it may be advisable to conduct a telephone survey of the remainder of nonrespondents. If the information is not significantly different, it may be reasonable to conclude that further pursuit of nonrespondents would not add anything significant to the study.

4.2 Conduct interviews of former students

4.2.1 Select interviewers. Use interviewers who would not be perceived by interviewees as having direct association with the program or who are not known by interviewees on a personal basis, such as instructors. Work-study students, advisory committee members, and school administrators, among others, could serve as excellent interviewers.

4.2.2 Prepare interviewers. All interviewers should be prepared to conduct interviews, whether the interviewing will be done face to face or by telephone. Interviewers should know how to introduce themselves and describe the purpose(s) of the follow-up study, and ask follow-up questions for acquiring

or verifying information. They should also be thoroughly familiar with the instrument upon which to record information to facilitate the recording of information both rapidly and accurately.

4.2.3 Caution interviewers. Voice inflections, demonstrated enthusiasm, body language, facial expressions or possible distractions from the sideline can influence the respondents' answers. Interviewers need to be cautious to secure all of the information requested without introducing bias influence upon the respondent.

Follow-up of Employers of Program Completers

5.0 Conduct a follow-up survey of employers of program completers employed in occupations targeted by the program.

5.1 Identify the program completers who are employed in occupations that the program prepared them to enter. This can be done by looking at the students' identification number and responses to two questions on the Student Follow-up Survey form suggested in Appendix D.

5.1.1 Program completer. If Step 2.1.5, above, and Step 3.0 in Section III were used, then the last digit of the identification number will indicate the status of the respondents. Program completers are designated as "1".

5.1.2 Employed. Question 2.1 in the Student Follow-up Survey form designates employment status. Select those persons who have indicated that they are "employed".

5.1.3 Related occupations. Question 2.2 in the Student Follow-up Survey form provides information on "job title" and "job duties". Determine whether or not the "job title" and "job duties" are for occupations that the program intended. A

list of job titles and duties related to the preparation provided by the program can be developed ahead of time and updated as necessary. The person compiling the information would then decide whether or not an individual's employment is related to the occupational education program based on information provided in question 2.2.

5.2 Prepare the instrument. A locally-developed instrument or the one proposed in Appendix E could be used for the follow-up of employers.

5.2.1 If your institution's instrument is used, it should not be longer than one sheet of paper printed on two sides. A long questionnaire may tend to discourage employers of program completers from responding.

5.2.2 For interviews, format the questions so that they are in the order that they will most likely be asked. The format should also permit the interviewer to note respondents' answers quickly and preferably without having to refer to a separate sheet of paper containing codes of possible answers.

5.2.3 Reproduce materials for a mail survey of employers.

a. Duplicate the questionnaire on colored paper. Light green and orange appear to encourage responses. Beige and sand are also popular. The reproduction should look "professionally" done. If a second mailing to those who do not respond to the first mailing is planned, print at least 50 percent more questionnaires than the number of employers to whom the instrument will be initially sent.

b. Duplicate a cover letter for transmitting the mail survey. Figure 7 is an example of a cover letter. If possible,

each letter should be individually signed. Reproduction of the letter should look "professionally" done.

5.3 A follow-up of employers of "Early Leavers" according to the categories specified in Step 3.0, Section III may be conducted. The information from such surveys should be kept clearly separated from that collected from employers of "Program Completers". The procedures for such surveys should follow Steps 5.1 and 5.2 above. Note that appropriate changes would need to be made in the second paragraph of the sample cover letter provided in Figure 7.

FIGURE 6

SAMPLE COVER LETTER FOR FORMER STUDENTS

(School Letterhead)

Representatives of business and industry, students, administrators, and the faculty of our high school are working together to improve our Automotive Mechanic Program. We are determined to provide our students the best occupational preparation possible with our resources. To do so, we need your help.

Please complete the enclosed questionnaire and return it by (date) in the envelope provided. Please do not put your name on the questionnaire; your answers will remain anonymous. Although you may choose not to answer some or all of the questions, we hope that you will take this opportunity to help the present and future students in the program.

On behalf of current and future students, faculty, and the administration of _____ School, I want to thank you in advance for completing the questionnaire. The information you provide will undoubtedly be helpful as we work to improve our program.

Sincerely,

(type name of department head or principal)
(title)

FIGURE 7

SAMPLE COVER LETTER FOR EMPLOYERS

(School Letterhead)

(Individually addressed)

Representatives of business and industry, students, administrators and the faculty of our school are working together to improve our Automotive Mechanics Program. We are determined to provide our students with the best preparation possible for their entry into the world of work.

The person noted below is a graduate of our program. We understand that this graduate is supervised by you. Will you please complete the enclosed questionnaire and return it by (date) in the envelope provided. Your answers will remain anonymous. Although you may choose not to answer some or all of the questions, we hope that you will help us better meet the employment needs of our present and future students by doing so.

On behalf of current and future students, the faculty, and the administration of _____ School and the representatives of business and industry who are working with us, I want to thank you in advance for completing the questionnaire. The information that you provide is critical to our improving our program.

Sincerely,

(typed name of department head or principal)
(title)

Name of Graduate _____

SECTION V

STUDENT DATA

Information collected during the follow-up surveys of former students and their employers can be compiled directly from the completed survey questionnaires. Survey questionnaires can be sorted into separate piles based on the information provided in the items of concern, then the number of instruments in each pile counted. The number of instruments in each pile could then be entered directly into the appropriate table in Appendix B.

As an alternative, it may be advantageous to transfer the information given on the survey questionnaires to a separate data sheet. By doing this, most of the needed information on any particular former student is contained on one sheet. The use of such a data sheet could also be very useful if the information is compiled with the assistance of a computer.

A locally-developed data sheet or the one suggested in Figure 8 could be used. Numerical codes should be developed for each item. As an example, "1978" could be coded as "78". The codes should be documented and used whenever information is being transferred from a questionnaire to a data sheet. This procedure will facilitate consistency in the transferring of information.

The "steps" recommended in this section refer to each of the "data elements" in Figure 8. As an example, "Step 1.0" refers to Item I on the Student Data form, "8.0" to Item 8, etc.

Figure 8

STUDENT DATA

A. Identification Number

1. Year entered _____ _____

2. Sequence number _____ _____ _____

3. Program status _____

B. Program Completion

4. Term completed _____

5. Year Complete _____ _____

C. Further Education

6. Educational status _____

7. Major or program _____ _____

Name _____

8. Relatedness to program _____

D. Current Employment

9. Employment status _____

10. Job title _____ _____

Name _____

11. Relatedness to program _____

12. Location of employment _____

13. Salary/wages (monthly _____ _____ _____ _____

14. Reason for unemployment _____

E. Special needs

15. Sex _____

16. Race/ethnicity _____

17. Disadvantagement _____

18. Handicap _____

19. Linguistic difference _____ First Language _____

F. Employer follow-up

20. Safety procedures _____

21. Work quantity _____

22. Work attitude _____

23. Engine tune-up _____

24. Engine overhaul _____

25. Electrical system _____

26. Fuel system _____

27. Lubrication and oil _____

28. Cooling system _____

29. Change, repair, and balance tires _____

30. Align wheels and repack front bearings _____

31. Manual transmissions _____

32. Automative transmissions _____

33. Exhaust system _____

34. Brake system _____

G. Courses/modules/units completed

35.

1.0 Year entered. Last two digits of year in which former student entered the program for the first time as reported in the identification number.

2.0 Sequence number. The one, two, or three digit number given in the identification number (see Step 2.1.4a in Section III).

3.0 Program status. One-digit number as reported in the identification number (see Step 3.0 in Section III and Step 2.1.5 in Section IV).

4.0 Term completed. Last term in which student was enrolled in the program. As an example: 1 = first quarter, 2 = second quarter, etc., or 1 = first semester, 2 = second semester, 3 = summer.

5.0 Year completed. Last two digits of the academic year in which the former student was last enrolled in the Automotive Mechanic Program, e.g., 78 = 1977-78 school year, 79 = 1978-79 school year, etc.

6.0 Educational status. Item 1.1 of Appendix D.

3 = currently attending school full-time

2 = currently attending school part-time

1 = currently not attending school

7.0 Major or program. Item 1.2 of Appendix D. List related majors or areas of studies in the high school, community college, technical school, or 4-year institution that would be related to automotive mechanic occupations, such as automotive or mechanical engineering, automotive mechanic, etc. Assign a number to each occupation.

8.0 Relatedness to program. If the area of study or major is related to the preparation that the former student received in the Automotive Mechanic Program in the school, enter "1" in the space. Enter "0" if the area of study or major is not related to being an automotive mechanic or related occupations.

9.0 Employment status. Item 2.1 in Appendix D.

4 = employed

3 = full-time military service

2 = unemployed

1 = not in labor force

10.0 Job title. Item 2.2 in Appendix D. List possible occupations in which graduates of the Automotive Mechanics Program could enter. Assign a unique number to each occupation. Often the same occupations may have different job titles. Use the information provided in "Job Duties" to determine if different job titles represent the same occupation.

11.0 Relatedness of program. Mark as "1" if the occupation is related to the preparations provided by the Automotive Mechanic Program. Mark "0" if the occupation is not related to the preparation.

12.0 Location of employment. Item 2.4 in Appendix D.

1 = Place of employment is within the borough in which the school is located.

2 = Place of employment is outside of the borough but within Alaska.

3 = Place of employment is outside of Alaska.

13.0 Salary/wages. Item 2.6 and 2.7 in Appendix D. Translate the information given into a monthly salary. Enter the amount in four digits, e.g., $1,200 should be entered as "1200" and $923 should be entered as "0923."

14.0 Reason for unemployment. Item 3.1 in Appendix D.

1 = Disability

2 = Location of available positions

3 = Further education

4 = Marriage

5 = Other educational opportunities

6 = Other

15.0 Sex. 1 = Female; 2 = Male

16.0 Race/Ethnicity.

0 = Unknown

1 = Asian-American or Pacific Basin

2 = Black American

3 = Caucasian other than Hispanic

4 = Hispanic

5 = Native or American Indian

6 = Other

17.0 Disadvantagement. Student was not expected to succeed or was unable to succeed due to academic or economic disadvantagement that was not due to a handicapping condition listed in 18.0, below.

1 = Academic, reading

2 = Academic computation

3 - Economic

0 = None

18.0 Handicap. Student was not expected to succeed or was unable to succeed in the regular program do to one of the following conditions:

1 = Mental retardation, educable

2 = Mental retardation, trainable

3 = Visual impairment or blindness

4 = Hearing impairment or deafness

5 = Orthopedic impairment

6 = Chronic illness, e.g., cerebral palsey, epilepsy, muscular dystrophy, etc.

7 = Mental disturbance

8 = Specific learning disability

9 = Other

0 = None

19.0 Linguistically-different student. Student who was not expected to or did not succeed in the regular program because his/her first language was other than English. Also specify the first language.

20.0 Safety procedures. Appendix E. Enter one-digit number that is circled.

21.0 Work quality. Appendix E. Enter one-digit number that is circled.

22.0 Work attitude. Appendix E. Enter one-digit number that is circled.

23.0 - 34.0 Appendix E. Enter the circled numbers in the corresponding spaces on the form.

35.0 to ___ Courses/modules/units completed. List the courses, modules, and/or units in the Automotive Mechanic Program. Then indicate whether or not the former student completed each.

SECTION VI

STUDENT ACHIEVEMENT

Information on the extent to which students achieve specific learning objectives or competencies of an automotive mechanic program can be used in two ways. First, the extent to which students attain certain competencies during their participation in an automotive mechanic program could provide some explanation as to why employers rate former students as they do. As an example, a low rate of achievement of the competency, "disassemble, inspect parts and correctly assemble a carburetor," may be related to low ratings given by employers on "fuel systems."

Second, the extent to which students achieve certain objectives can serve as a means of relatively immediate feedback on the effects of changes to the program. In the same vein, the extent to which students achieve certain objectives is a measure of teaching effectiveness for those objectives taught in the respective portion of an automotive mechanic program. As an example, a low rate of achievement on an objective concerned with "repack front wheel bearings" may indicate that for some reason the instruction for that competency is ineffective and, therefore, should be modified.

Competencies or learning objectives for a program should be derived from the on-the-job requirements for the automotive mechanic and related occupations. Therefore, attainment of these competencies should enable students to become employed as automotive mechanics or in related occupations (e.g. parts manager). Information collected from employers on the performance of former students could indicate that an occupational or task analysis is in order.

There are a variety of ways to measure student learning. Measuring Student Growth by Erickson and Wentling (Allyn and Bacon, Inc., 1977) provides relatively

detailed means of determining whether or not students acquire knowledge, skills, and attitudes in vocational subject matter.

Recording of student attainment of objectives can be done in different ways. One way is to list all competencies, then check off each student on a separate sheet as each objective is achieved. Figure 9 proposes an alternative form for recording student achievement. A recording sheet is prepared for each student. Major maintenance functions are listed in the left-hand column. Each box opposite a major fuction represents an objective or competency related to that function. As an example, the box in the upper-left corner of Figure 9 is for objective or competency 1.1 which has something to do with engine tune-ups. The instructor would then write the date and place his/her initials in the box when the student, in this case Bernice C. Able, achieved objective or competency 1.1.

Regardless of the particular form used to record student progress, it is very important that the progress be recorded and that the recording express competency attainment as near as possible. Without accurate student progress or competency attainment records, the evaluation process and its impact become severely limited. The information necessary to make program modifications toward program improvement is very dependent upon such student records.

This section of the model does not attempt to provide the evaluator nor the instructor with the various options to recording student achievement. Such a recording system could become the subject of a book itself. It is the purpose of this section to emphasize the importance of student achievement records for this evaluation model.

FIGURE 9

EXAMPLE OF A FORM FOR RECORDING STUDENT ACHIEVEMENT

STUDENT: Able, Bernice C.									
Function	Competency								
	.1	.2	.3	.4	.5	.6	.7	.8	.9
1.0 Engine Tune-Up									
2.0 Engine Overhaul									
3.0 Electrical System									
4.0 Fuel System									
5.0 Lubrication & Oil Change									
6.0 Cooling System									
7.0 Wheels and Tires									
8.0 Alignment									
9.0 Manual Trans.									
10.0 Automatic Trans.									
11.0 Exhaust System									
12.0 Brake System									

SECTION VII

PROGRAM REVIEW

Data collection in this model is based on a two-year cycle. At the conclusion of each two-year cycle the information should be compiled and entered into the appropriate tables in Appendix B. Other information, such as data on costs of conducting the program, should also be documented at this time. The information presented in the tables should then be used to determine the extent to which the Automotive Mechanic Program meets the criteria specified in Appendix A. The diagram in Section I (Figure 2) can then be used to decide whether the program should be continued as it currently exists, modified, or terminated.

Alternative displays to some of the tables contained in Appendix B are provided in Appendix C. Each display should be considered as a proposed format for presenting the most relevant information. It may be necessary to expand or modify them. Each step listed below refers to a display number in Appendix B. For example, "Step 1.0" refers to display number "1", "Step 2.0" refers to display number "2", and so forth. The appropriate display should be in hand when reading the instructions for each step.

1.0 Program description (display number "1" in Appendix B).

1.1 Program Name. Enter the official name of the program. It may be useful to enter the popular name of the program if it has one (e.g., "also known as the ' ... Program'").

1.2 Program Mission. Describe the general intent of the program, e.g., "Enable entry-level learners to acquire the skills, knowledge, and beliefs necessary for acquiring employment as ... or pursuing further education in ... or completing a program in ... .

1.3 Related Occupation. List all occupations for which the Automotive Mechanic program directly prepares its graduates to enter.

1.4 Date Approved. Indicate the date the program was first approved by the administration to be offered and indicate dates when revisions or updates to the program were approved.

2.0 Courses, modules, and/or units associated with the program.

2.1 Courses/modules/units in program for which the program is directly responsible. The program could be the program identified in Table 1 or any clearly identifiable group of instructional personnel who are considered as a unit for budgetary purposes, such as a department.

2.2 Course/modules/units on which program is dependent but not responsible. List the course number, title, hour and/or credits of all courses in which students in the program identified in Table 1 must enroll to complete the program successfully but for which the program does not provide instructors; that is, the administrative unit is not responsible for the salaries of the instructors for those courses.

2.3 Courses/modules/units supporting other programs. List the numbers of courses for which the program is responsible (i.e. the program is responsible for the salary of the instructors for the courses and has curricular control of the contents of the courses) but are primarily offered for students enrolled in other programs in the school.

3.0 Review Summary (Appendix A).

3.1 The major questions, subquestions, and criteria for answering the questions are listed in Appendix A (Table 3). Major questions are identified by letters (e.g., A, B, etc.). Subquestions are identified by whole numbers (e.g., 1.0, 2.0, 3.0, etc.). Criteria are identified by "fractional" numbers (e.g. 1.1, 1.2, 4.3, etc.). Values should have been entered in the spaces provided in the blanks indicated in each criteria prior to the use of this display.

3.2 The program staff should review the program as follows:

3.2.1 Determine the extent to which the program satisfies each criterion ("fractional" numbers). When available, use the information in the displays suggested under the "Table" heading, which refers to the tables in Appendix B, to facilitate making the decision.

3.2.2 In the space provided under the heading "Conclusion", specify whether or not each criterion has been met (e.g. 1 - criterion satisfied, 0 - criterion has not been satisfied). As an alternative, you may wish to specify the degree to which each criterion has been satisfied (e.g. 0 - criterion not satisfied, 1 - criterion somewhat satisfied, perhaps up to 4 - criterion fully satisfied). Establish the scores to be used and specify the values and their respective meanings with the Review Summary prior to beginning the scoring process. Do not score criteria that are not being judged.

3.2.3 Compute the average score for each subquestion (whole number). This is obtained by totaling all of the scores for the criteria under a subquestion and dividing by the number of criteria scored. As an example, criterion 1.1 has been scored as "1" and criterion 1.2 has been scored as "0"; the average score for subquestion 1.0 is "0.5". Enter the number in the space under the "Decision" heading, to the right of item 1.0 under "Criteria."

3.2.4 Review the subquestion scores under "Decision" and specify whether the major question (designated by a letter) can be answered "yes" (1) or "no" (0).

3.2.5 Considering the "Decisions" for major questions (double underlined spaced), recommend whether or not to: 1) continue the program as it currently exists, 2) modify the existing program, or 3) terminate the program.

3.3 The program's advisory committee could assist with the review by confirming or disagreeing with the conclusions and decisions made by the program staff. The committee's assistance could be particularly useful when considering conclusions listed under major questions D (Is the program efficient?) and E (Should the program be modified?).

3.4 Table 3A in Appendix C could be used as a replacement or supplement to Table 3 (in Appendix A).

4.0 Program assessment. Procedures and materials developed by the Alaska Department of Education may be used to assess an automotive mechanic program. As an alternative, Appendix F contains instrumentation developed by the Oregon Department of Education. A summary of the findings (e.g., "Self-Evaluation Assessment Value Profile" suggested in Appendix F) should follow immediately after Table 4. The purpose of Table 4 is to establish the credibility of the self-assessment. Those persons who participated in the self-assessment process should be identified under Item 1. Persons (such as a state supervisor or district vocational education director) and/or groups (such as the program advisory committee) who attest to the accuracy of the report should be listed under Item 3. You may wish to consider the discussion on advisory committees and third-party or external evaluators presented in Steps 1.2 and 1.3 in Section II of this report.

5.0 Placement of program completers.

5.1 Using the code number in the identification number (Step 2.1.5 in Section IV), identify all program completers who responded to the follow-

up study. If the "Student Follow-up Survey" questionnaire (Appendix D) was used, do the following to enter information in Table 5:

5.1.1 Identify all persons who indicated that they were in full-time military service (Item 2.1, Appendix D). Enter the number opposite "Military Service" in Table 5. Set these questionnaires aside.

5.1.2 Identify all persons who were employed in related occupations (Items 2.1 and 2.2, Appendix D). Enter the number opposite "Employed in Related Occupations" in Table 5. Set these questionnaires aside.

5.1.3 Identify all persons who are pursuing further education (Item 1.1, Appendix D) from the remaining questionnaires. Enter the number opposite "Further Education in Related Area", Table 5. Set these questionnaires aside, too.

5.1.4 Identify all persons who are unemployed. Enter the number opposite "Unemployed" in Table 5. Set these questionnaires aside.

5.1.5 Identify all persons who are "Not In The Labor Force" (Item 2.1, Appendix D). Enter the number opposite "Out of Labor Market" in Table 5. Set these aside.

5.1.6 Identify all persons who are currently attending school full-time or part-time (Item 1.1, Appendix D) from the remaining questionnaires. Enter the number opposite "Further Education in Unrelated Area" in Table 5. Set these questionnaires aside.

5.1.7 Identify those persons who are employed in occupations unrelated to the program's intents (Items 3.1 and 2.2, Appendix D). Enter the number opposite "Employed in Unrelated Occupation" in Table 5.

5.1.8 Compute percentages using the "Total" as the divisor. The sum of the percentages should equal 100. Enter the total number of

survey questionnaires sent to program completers opposite "No. in Survey" in Table 5. Divide the "Total" by the "No. in Survey" and enter the percentage opposite "% Responding" in Table 5.

5.2 The classification scheme described above assumes a heirarchy of statuses. As an alternative use Table 5A in Appendix C which does not assume a heirarchy.

6.0 Job titles of employed program completers. Sort the "Student Follow-Up Survey" questionnaires or other instruments chosen using the code number in the identification number (Step 2.1 in Section IV) to identify program completers. Sort the forms for employed program completers by job title (Items 2.1 and 2.2 in the "Student Follow-Up Survey", Appendix D) and by whether the job titles are related or unrelated to the program intents. The use of a list of job titles as described in Step 5.1.3 in Section IV could facilitate this task. List the job titles in Table 6 and enter the number of persons employed who specified each job title.

7.0 Majors or programs in which program completers are enrolled. For the program completers who are pursuing further education (Item 1.1 in the "Student Follow-Up Survey", Appendix D), sort the forms by major or area of study (Item 1.2 in the Appendix D survey). List the majors and areas of study in Table 7 according to whether or not they are related or unrelated to the program intents. Enter the number of persons who specified each major or program.

8.0 Placement of early leavers. Using the code number in the identification number (Step 2.1.5 in Section IV), identify all early leavers who participated in the follow-up study. If the "Student Follow-Up Survey" questionnaire (Appendix D) was used, compile the data as suggested in Steps 5.1.1 through 5.1.8 above. As an alternative, use Table A in Appendix C

which does not assume a heirarchy.

9.0 Relationship of duration in the program and employment for early leavers.

9.1 Identify early leavers (identification number described in Step 2.1.5 of Section IV) who are employed in related and unrelated occupations (Items 2.1 and 2.2 of the "Student Follow-Up Survey", Appendix D).

9.2 If you included the extent of participation in the program in the identification number (Step 2.1.4 of Section IV) sort the completed questionnaires by program statuses 2, 3, 4, and 5 for those employed in occupations unrelated to the program intents.

9.3 For those employed in related occupations, compute the percentage of individuals in each of the time categories; the four percentages under "E" for each time category should total 100 percent. Do the same for those employed in unrelated occupations.

10.0 Relationships of duration in the program and further education for early leavers.

10.1 Identify leavers (identification number described in Step 2.1.5 of Section IV) who are pursuing further education (Item 1.1 of the "Student Follow-Up Survey", Appendix D).

10.2 If the extent of participation in the program was included in the identification number (Step 2.1.5 of Section IV), sort the completed instruments by program statuses 2, 3, 4, and 5 for those pursuing education in areas unrelated to the intents of the program.

10.3 For those pursuing further education in related areas, compute the percentage of them in each of the time categories; the four percentages under "E" for each time category should total 100 percent. Do the same for those pursuing education in unrelated areas.

11.0 Labor market projections. Acquire this information from the Alaska Department of Education (Alaska Occupational Information Coordinating Council).

12.0 Employer satisfaction with occupational preparation of program completers. If Subsection 5.0 of Section IV was used, do the following to complete Table 12:

12.1 Enter the description of each function or area on which supervisors rated the quality of instruction (see "Employer Questionnaire" in Appendix E).

12.2 For each function, determine the number of respondents who checked each response category, e.g., the number who indicated "5", the number who indicated "4", etc.

12.3 Compute the percentage of responses in each response category for each function, e.g., compute percentages by dividing the number selecting a response category by the total number of responses for the function.

13.0 Comparison by employers of vocational and non-vocational graduates (Item 3.1 in Appendix E).

13.1 For program completers in each school year, determine the number of employers who checked each of the choices.

13.2 Compute the percentage of responses in each response category by dividing the number selecting the choice by the total number of responses for the item. Enter the percentages in Table 13. The sum of the percentages for any given year should be 100.

14.0 Student Achievement (Section VI).

14.1 List each competency as specified in Section VI (Figure 9) in the left column of Table 14. As an alternative, list the number of each competency that students could attain in the Automotive Mechanic Program. If additional sheets are needed, include the column headings (e.g., "Competency", "Number and Percentage Per Year", etc. on each extra sheet.

14.2 Enter the number of students who achieved each learning objective or competency during the school year.

15.0 Enrollment and completions in each course/module/unit.

15.1 For each course required of students enrolled in the program for which the program is responsible, enter the number of students who initially enrolled under "N/IN". Set a time during each term when this information will be collected on all courses.

15.2 Compute the percentage of students who successfully complete the course by dividing the number of students who pass the course by the number of students who initially enrolled in the course (N/IN). Enter this number under "% Out".

16.0 Special Population Groups. Information on the sex, ethnicity, handicapping conditions, disadvantaging conditions, and linguistic differences of students should be available on the reports prepared for the Alaska Department of Education. Enter the numbers under "N" and the percent that represents of the total (the number under "N" divided by the total number under each category for the respective year). Tables 16A and 16B in Appendix C may be used to supplement Table 16 and to give further specific information pertaining to special groups completing the program and/or being employed.

17.0 Cost and benefits for program completers.

17.1 Instructional time for program completers. Enter the average (mean) number of actual clock hours and calendar weeks that students in the Automotive Mechanic Program need to acquire the skills, knowledge, and attitudes to become employed. If a program has a set duration, e.g., two years, one year, six months, etc., estimate the number of weeks in the program, then multiply the number of weeks by the number

of contact hours.

17.2 "Estimated salary/wages for typical occupation at bottom of career ladder" is the estimated amount of monthly pay that an individual at the bottom, e.g. unskilled or semiskilled level, of the career ladder in which the related occupations for which the program is preparing students is located, e.g., "self service gas station attendent." It may be necessary to record the estimated salary/wages as a range of amounts if there are relatively large numbers of occupations in the "bottom" of the career ladder.

17.3 Salary/wages of program completers employed in related occupations.

17.3.1 Identify program completers by using identification number (see Step 2.1.5 in Section IV and Step 2.1.2 in Section III) who responded to the follow-up survey. From this group, identify those that are employed in related occupations (Items 1.2 and 1.3 in the "Student Follow-Up Survey", Appendix D).

17.3.2 Enter the number of program completers who are employed in related occupations and have reported salary/wages (Item 2.6 in the "Student Follow-Up Survey", Appendix D).

17.3.3 Compute the mean salary/wages by dividing the sum of all salary/wages reported on the instrument (Item 2.6 in Appendix D) by the total "Number". If necessary, convert salary/wages into full-time monthly amounts. Be sure the salary/wages are expressed for common time periods, e.g., by hour, week, month, etc. Enter the mean opposite "Mean".

17.3.4 "Median" is the middle amount of salary/wages. Arrange the instruments in order of amount of salary/wages in monthly terms. Count the number of forms from either the highest

salary/wages or the lowest salary/wages until you reach the instrument representing one-half of all the instruments. This is the "Median" or middle amount of salary/wages. Enter this in Table 17.

17.3.5 Enter the highest and lowest salary/wages opposite "Range".

18.0 Personnel costs and staffing patterns.

18.1 Instructional personnel FTE. Enter the FTE for instruction personnel in each category for which the program is reponsible. If a staff member is shared with another program only count the time allocated to the Automotive Mechanic Program. Compute the percentage of FTE by dividing the number of FTE in each category by the total number of FTE for all categories.

18.2 Instructional personnel cost. Enter the cost of all instructional personnel in each category included in preceding table. If one or more instructional personnel provide instruction in the respective program less than full-time, include only that portion of the salary and payroll benefits applicable to the program.

19.0 Other Operating Costs. Enter the amount actually spent in each category. Consider only costs for annual operation of the program and not those considered as "capital" costs. Also do not consider costs which are not recurring (such as heavy equipment, which would not normally be replaced too frequently).

20.0 Permanent, dedicated space.

20.1 List the location, e.g., room number and building, of all space that is solely used by the program or by only one or two other programs because of the uniqueness of equipment, location, arrangement, etc.

20.2 For each location, enter the type of facility (e.g., classroom, laboratory) and the maximum number of students that the space can accomodate.

20.3 For each location, list the terms under which the space is used.

20.4 Usage indicators.

20.4.1 Hours. Enter the total number of hours per week that the space is assigned to the program. If the program is the only user of the space, then the number of hours is the total number of hours that instruction is offered by the school each day times the number of instructional days in the week.

20.4.2 Intensity. The intensity of use of the location is equal to the total number of students using the location during any given week while it is assigned to the program, divided by the product of the total number of stations or maximum of students that the space can accomodate at any given time (see 20.2, above) and the total number of hours assigned to the program per week (20.4, above). The intensity can also be expressed as follows:

$$\text{Intensity} = \frac{S}{M \times H}$$

When: S = total number of students during any given week who are using the location when it is assigned to the program per hour;

M = total number of stations of maximum number of students who can use the location at any given time; and

H = total number of hours that the location is assigned to the program.

20.5 Table 20A (Appendix C) may be used in place of or as a supplement to Table 20 (Appendix B).

APPENDIX A

REVIEW SUMMARY

APPENDIX A
REVIEW SUMMARY

Review Period _____

	Criterion	Table	Conclusion	Decision
A.	IS THE PROGRAM EFFECTIVE?			_____
1.0	Are former students employed or pursuing further education?			_____
1.1.	_____ percent of program completers are employed or pursuing further education in related occupations.	5,6,7	_____	
1.2	_____ percent of early leavers are employed or pursuing further education in related occupations.	8,9,10	_____	
2.0	Are labor market demands being met?			_____
2.1	There is a minimum of _____ positions available in the labor market in related occupations.	11	_____	
2.2	_____ percent of program completers are adequately prepared to perform the necessary functions of related occupations.	12,13,14	_____	
3.0	What are the enrollment trends for the program?			_____
3.1	At least _____ students are enrolled in each course in the program	15	_____	
3.2	At least _____ students are enrolled in each course of the program complete the program.	15	_____	
4.0	Does the program provide equal opportunity for special population groups?			_____

	Criterion	Table	Conclusion	Decision
4.1	_____ percent of the students enrolled in the program are in special population groups.	16	_____	
B.	ARE THE COSTS ACCEPTABLE?			_____
5.0	Are the costs to students for participating in the program acceptable?	17		_____
6.0	Are the costs for conducting the program acceptable?			_____
6.1	The total operating cost for the program should not exceed $_____.	18,19	_____	
6.2	Space dedicated to the program being utilized adequately.	20	_____	
C.	IS THE PROGRAM ESSENTIAL?			_____
D.	IS THE PROGRAM EFFICIENT?			_____
7.0	Can the costs of the program be altered without affecting program effectiveness?			_____
7.1	Staffing patterns should not be changed.	18	_____	
7.2	Consumption of instructional materials should not be changed.	19	_____	
7.3	Leasing of instructional equipment should not be changed.	19	_____	
7.4	Leasing of instructional space should not be changed	19	_____	
7.5	Contracted services should not be changed.	19	_____	

	Criterion	Table	Conclusion	Decision
8.0	Can total instructional time be reduced without affecting program effectiveness?			_____
8.1	Amount of student contact time should not be reduced.	17	_____	
8.2	A reduction in total instructional time would result in a reduction in cost of materials, equipment, and/or space.		_____	
E.	SHOULD THE PROGRAM BE MODIFIED?			═══
9.0	The program can be made effective and efficient		_____	
10.0	The cost for modifying program is acceptable		_____	
11.0	The cost of the modified program is acceptable		_____	

RECOMMENDATIONS:

1. _____ Continue program as is.
   _____ Modify existing program
   _____ Terminate existing program

   Program Coordinator/Director:_____ Date: _____

2. _____ Continue program as is.
   _____ Modify existing program.
   _____ Terminate existing program.

   Advisory Committee Chairperson:_____ Date: _____

3. _____ Continue program as is.
   _____ Modify existing program.
   _____ Terminate existing program.

   Principal:_____ Date: _____

APPENDIX B

SUGGESTED DATA DISPLAYS FOR THE PROGRAM STATUS HANDBOOK

APPENDIX B

SUGGESTED DATA DISPLAYS FOR THE PROGRAM STATUS HANDBOOK

	Table
Suggested Cover Page	
Summary Information	
Program Description	1
Courses/Modules/Units	2
Review Summary .....(See Appendix A).....	3
Self-Evaluation	4
Program Effectiveness	
Number and Percentage of Program Completers in Each Employment Status by Year	5
Number of Program Completers Who Are Employed by Job Title by Year	6
Number of Program Completers Who Are Pursuing Further Education by Major or Program by Year	7
Number and Percentage of Early Leavers in Each Employment Status by Year	8
Percentage of Employed Early Leavers Who Were Employed and Not Employed in Related Occupations by Duration That They Participated in the Program by Year	9
Percentage of Early Leavers Who Were Pursuing Further Education in Related Areas and Unrelated Areas by Duration That They Participated in the Program by Year	10
Labor Market Demand in Occupations Related to the Program as Estimated by the Alaska Department of Education and Other Sources	11
Number and Percentage Distribution of Responses by Supervisors on the Adequacy of Performance of Technical and Non-Technical Fuctions by Program Completers Employed in Related Occupations	12

Table

Comparison by Employers of Program Completers to Those Who Have Not Completed Automotive Mechanics Program 13

Number of Students Who Achieve Each Competency Each Year 14

Total Number of Students Who Initially Enroll In and Percentage Who Complete Successfully Each Course/Module/Unit for Which Program is Responsible by Year 15

Number and Percentage of Students Enrolled in Program in Each Special Population Group by Year 16

Program Cost

Estimated Cost and Benefit for Program Completers 17

Personnel Cost (FTE and Salary and Benefits) 18

Annual Expenditures for Materials, Space, Maintenance, Contracted Services, and Travel by Year 19

Type and Utilization of Permanent, Dedicated Space Currently Being Used Exclusively by the Program 20

COVER PAGE

P R O G R A M S T A T U S

Program Name: _____

School: _____

Address: _____

TABLE 1

PROGRAM DESCRIPTION

PROGRAM NAME:

PROGRAM MISSION:

RELATED OCCUPATIONS:

Date Approved:

Date(s) Revised:

TABLE 2

COURSES/MODULES/UNITS IN PROGRAM
FOR WHICH PROGRAM IS DIRECTLY RESPONSIBLE

COURSE NUMBER	COURSE TITLE

COURSES/MODULES/UNITS ON WHICH PROGRAM
IS DEPENDENT BUT NOT RESPONSIBLE

COURSE NUMBER	COURSE TITLE

COURSES/MODULES/UNITS SUPPORTING OTHER PROGRAMS

COURSE NUMBER	SUPPORTED PROGRAM(S)

TABLE 3

REVIEW SUMMARY

Table 3 is found as Appendix A of this report, but should be displayed as Table 3 in the final evaluation report.

TABLE 4
SELF-EVALUATION
PROGRAM ASSESSMENT

1. The Assessment Value Profile appearing on the next page is the results of a self-evaluation conducted by the following persons:

NAME POSITION

2. The self-evaluation was completed on _____.

3. The results of the self-evaluation reported on the next page were verified by the following person(s):

NAME POSITION

4. The results of the self-evaluation were verified on _____.

TABLE 5

Number and Percentage of Program Completers
in Each Employment Status by Year

STATUS	NO. & PERCENT PER YEAR									
	19		19		19		19		19	
	N	%	N	%	N	%	N	%	N	%
Employed in Related Occupation.										
Employed in Unrelated Occupation										
Further Education in Related Area										
Further Education in Unrelated Area										
Military Service										
Unemployed										
Out-of-labor Market										
TOTAL										

No. in Survey =

% Responding =

TABLE 6
Number of Program Completers who are
Employed by Job Title by Year

JOB TITLE	NUMBER PER YEAR				
	19__	19__	19__	19__	19__
Related Occupations					
Unrelated Occupations					
TOTAL					

TABLE 7
Number of Program Completers who
are Pursuing Further Education by Major or Program by Year

MAJOR	NUMBER PER YEAR				
	19__	19__	19__	19__	19__
Related Area					
Unrelated Area					
TOTAL					

TABLE 8

Number and Percentage of Early Leavers in Each Employment Status by Year

EMPLOYMENT STATUS	NUMBER & PERCENTAGE PER YEAR									
	19		19		19		19		19	
	N	%	N	%	N	%	N	%	N	%
Employed in Related Occupations										
Employed in Unrelated Occupations										
Pursuing Education in Related Area										
Pursuing Education in Unrelated Area										
Unemployed										
Out-of-Labor Market										
TOTAL										
No. in Survey										
% Responding										
% Usuable										

TABLE 9

Percentage of Employed Early Leavers Who Were Employed (E) and Not Employed (N) in Related Occupations by Duration that They Participated in the Program by Year

DURATION IN PROGRAM	PERCENTAGE IN RELATED (E) AND UNRELATED (N) PER YEAR									
	19__		19__		19__		19__		19__	
	E	N	E	N	E	N	E	N	E	N
0 - 25%										
26 - 50%										
51 - 75%										
76 - 99%										
TOTAL NUMBER PER YEAR										

TABLE 10

Percentage of Early Leavers Who Were Pursuing Further Education in Related Areas (E) and Unrelated Areas (N) by Duration that They Participated in the Program by Year

DURATION IN PROGRAM	PERCENTAGE IN RELATED (E) AND UNRELATED (N) AREAS PER YEAR									
	19__		19__		19__		19__		19__	
	E	N	E	N	E	N	E	N	E	N
0 - 25%										
26 - 50%										
51 - 75%										
76 - 99%										
TOTAL NUMBER PER YEAR										

TABLE 11
Labor Market Demand in Occupations Related to the Program as Estimated by the Alaska Department of Education and Other Sources.

OCCUPATIONS	NUMBER OF POSITIONS PER YEAR				
	19__	19__	19__	19__	19__
STATEWIDE					
ADMINISTRATIVE DISTRICT					

TABLE 12

Number and Percentage Distribution of Responses by Supervisory on the Adequacy of Performance on Technical and Non-Technical Functions by Program Completers Employed in Related Occupations During 19__ to 19__.

FUNCTIONS	RESPONSE DISTRIBUTION*											
	5		4		3		2		1		0	
	N	%	N	%	N	%	N	%	N	%	N	%
Non-Technical												
Safety												
Work Quality												
Work Attitude												
Technical												
Engine Tune-Up												
Engine Overhaul												
Electrical System												
Fuel System												
Lubricate and Change Oil												
Cooling System												
Change, Repair and Balance Tires												
Align Wheels and Repack Front Bearings												
Manual Transmission												
Automatic Transmission												
Exhaust Systems												
Brake System												

Total Number of Respondents: _____ for 19__; _____ for 19__; _____ for 19__; _____ for 19__; _____ for 19__.

* 5= Has all of skills; 4 = Has most of skills; 3 = Has many of skills; 2 = Has few of skills; 1 = Has none of skills; 0 = Not observed.

TABLE 13

COMPARISON BY EMPLOYERS OF
PROGRAM COMPLETERS TO
EMPLOYEES WHO DID NOT
COMPLETE AUTOMOTIVE MECHANICS
PROGRAM BY YEAR

	PERCENTAGE PER YEAR					
JUDGEMENT	19___	19___	19___	19___	19___	19___
Vocational Students Are Better						
Vocational Students Perform Approximately the Same as Non-Vocational Students						
Vocational Students Are Not As Well Prepared						
No Opinion						
TOTAL						

TABLE 14

NUMBER OF STUDENTS WHO
ACHIEVE EACH COMPETENCY
EACH YEAR

	NUMBER PER YEAR					
COMPETENCY	19___	19___	19___	19___	19___	19___
Engine Tune-Up						
Engine Overhaul						
Electrical System						
Fuel System						
Lubrication and Oil Change						
Cooling System						
Wheels and Tire Systems						
Alignment						
Manual Transmission						
Automatic Transmission						
Exhaust System						
Brake System						
(Continue List As Needed)						

TABLE 15

Total Number of Students Who Initially Enroll (N/IN)*
in and Percentage Who Complete Successfully (%OUT)
Each Course/Module/Unit for Which Program
is Responsible by Year

COURSE/ MODULE/ UNIT	TERM LINE NO.	ENROLLMENT (N/IN) AND COMPLETIONS (%OUT) PER YEAR									
		19__		19__		19__		19__		19__	
		N/IN	%OUT	N/IN	%OUT	N/IN	%OUT	N/IN	%OUT	N/IN	%OUT

* Enrollment for each term is computed on week _____.

TABLE 16

Number and Percentage of Students Enrolled in Program in Each Special Population Group by Year

POPULATION GROUP	NUMBER AND PERCENTAGE PER YEAR									
	19		19		19		19		19	
	N	%	N	%	N	%	N	%	N	%
SEX: Female										
Male										
TOTAL										
ETHNICITY:										
Caucasian										
Native or American Indian										
Asian										
Black										
Hispanic										
Other										
TOTAL										
HANDICAPPING CONDITIONS:										
Hearing Impairment										
Mental Retardation										
Orthopedic Impairment										
Serious Emotional Disturbance										
Sight Impairment										
Speech Impairment										
Other										
SUBTOTAL										
DISADVANTAGING CONDITIONS:										
Academic										
Economic										
SUBTOTAL										
TOTAL										
English as a Second Language/Bilingual Education										
TOTAL										

TABLE 17

ESTIMATED COST AND BENEFIT
FOR PROGRAM COMPLETERS

ITEM	AMOUNT					
	19___	19___	19___	19___	19___	19___
Estimated salary/wage for typical occupation at bottom of career ladder						
Salary/wage of program completer employed in related occupations:						
MEAN						
MEDIAN						
RANGE						
NUMBER						
Mean instructional time for program completers:						
HOURS						
WEEKS						

TABLE 10
PERSONNEL COST

Number and Percentage of FTE for
Instructional Personnel by Year

PERSONNEL STATUS	FTE AND PERCENT PER YEAR									
	19		19		19		19		19	
	FTE	%	FTE	%	FTE	%	FTE	%	FTE	%
INSTRUCTORS										
Full Time										
Part Time										
AIDE/TECHNICIAN										
Full Time										
Part Time										
OTHER _____										
TOTAL										

Amount of Dollars Expended for Salaries and Payroll Benefits
of Instructional Personnel in Each Status by Year

PERSONNEL STATUS	AMOUNT PER YEAR				
	19___	19___	19___	19___	19___
Regular Faculty					
Aide/Technician					
Other _____					
TOTAL					

TABLE 19

Annual Expenditures for Materials, Space, Maintenance, Contracted Services, and Travel by Year

RESOURCE	AMOUNT PER YEAR				
	19__	19__	19__	19__	19__
Materials and Supplies					
Equipment Rental					
Leased Space					
Repairs and Replacements					
Contracted Services					
Travel					
Other					
TOTAL					

TABLE 20

Type and Utilization of Permanent, Dedicated
Space Currently being Used Exclusively by the Program

LOCATION	TYPE FACILITY *	TERM	USAGE INDICATORS	
			HOURS	INTENSITY**

* Standards:

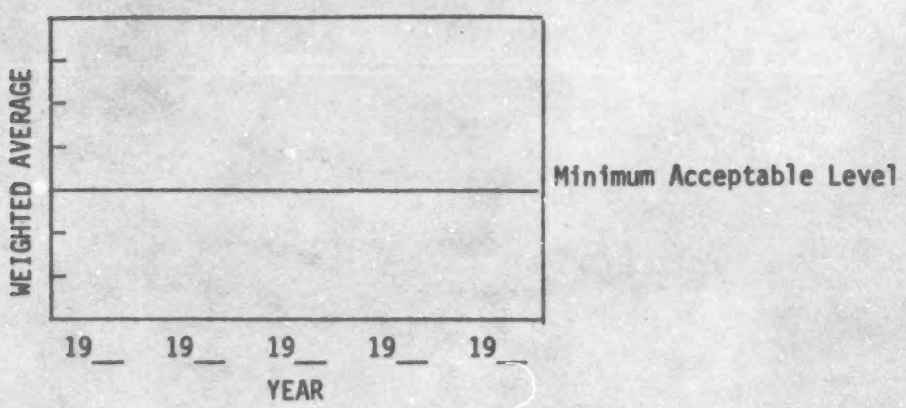
** Intensity of Utilization - Total number of students using location each hour per week ÷ (Total number of stations in location x total number of hours in school week)

APPENDIX C

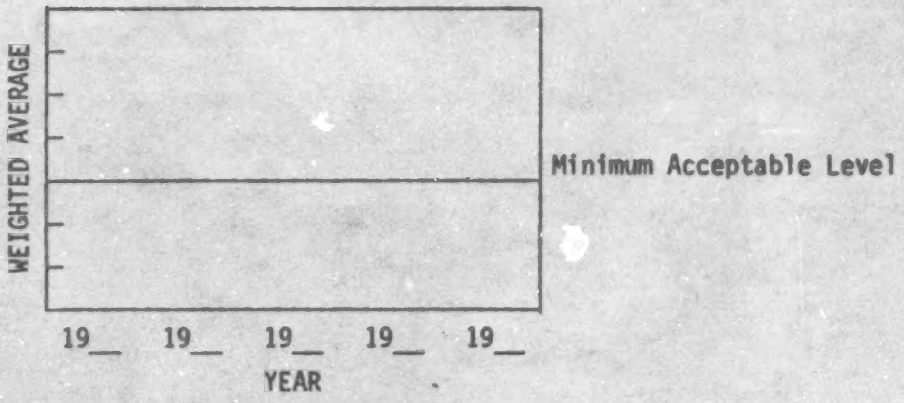
ALTERNATIVE DATA DISPLAYS FOR THE PROGRAM STATUS HANDBOOK

TABLE 3A
REVIEW SUMMARY PROFILE

PROGRAM EFFECTIVENESS



PROGRAM COST



PROGRAM EFFICIENCY

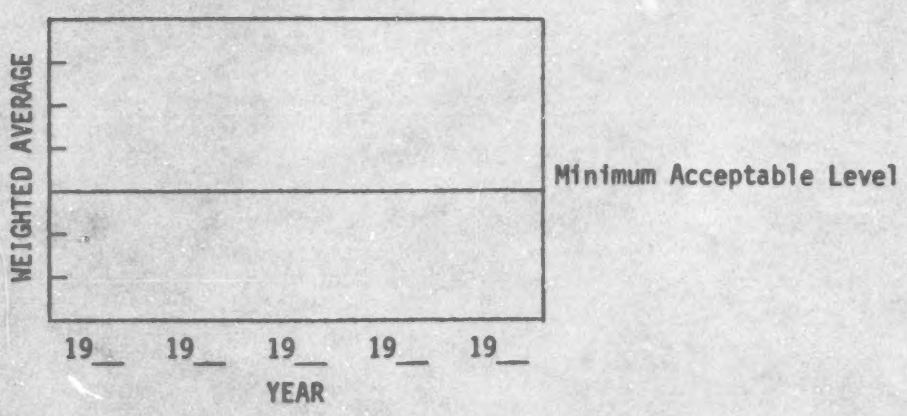


TABLE 5A

Number and Percentage of Program Completers
by Employment and Education Status
During 19__

EDUCATIONAL STATUS

EMPLOYMENT STATUS		Not Attending School		Full-time Related		Part-time Related		Full-time Unrelated		Part-time Unrelated		TOTAL	
		N	%	N	%	N	%	N	%	N	%	N	%
Employed	N												
	%												
Military Service	N												
	%												
Unemployed	N												
	%												
Out-of Labor Market	N												
	%												
TOTAL	N												
	%												

No. in Survey =

% Responding =

TABLE 8A

Number and Percentage of Early Leavers
by Employment and Education Statuses
During 19__

EMPLOYMENT STATUS		EDUCATIONAL STATUS: Not Attending School		Full-time Related		Part-time Related		Full-time Unrelated		Part-time Unrelated		TOTAL	
		N	%	N	%	N	%	N	%	N	%	N	%
Employed	N												
	%												
Military Service	N												
	%												
Unemployed	N												
	%												
Out-of-Labor Market	N												
	%												
TOTAL	N												
	%												

No. in Survey =

% Responding =

TABLE 16A

Number and Percentage of Students
Who Completed the Program by Group and by Year

GROUP	NUMBER AND PERCENTAGE PER YEAR									
	19		19		19		19		19	
	N	%	N	%	N	%	N	%	N	%
SEX: Female										
Male										
TOTAL										
ETHNICITY:										
American Indian										
Asian										
Black										
Caucasian										
Hispanic										
Other										
TOTAL										
HANDICAPPING CONDITIONS:										
Hearing Impairment										
Mental Retardation										
Orthopedic Impairment										
Serious Emotional Disturbance										
Sight Impairment										
Speech Impairment										
Other										
SUBTOTAL										
DISADVANTAGING CONDITIONS:										
Academic										
Economic										
SUBTOTAL										
TOTAL										
English as a Second Language/Bilingual										

TABLE 16B

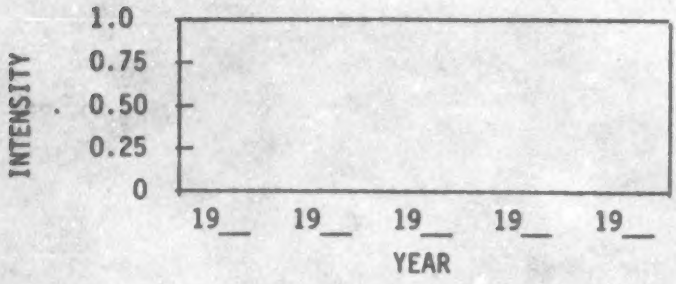
Number and Percentage of Program
Completers who were Employed by Group and by Year

GROUP	NUMBER AND PERCENTAGE PER YEAR									
	19		19		19		19		19	
	N	%	N	%	N	%	N	%	N	%
SEX: Female										
Male										
TOTAL										
ETHNICITY:										
American Indian										
Asian										
Black										
Caucasian										
Hispanic										
Other										
TOTAL										
HANDICAPPING CONDITIONS:										
Hearing Impairment										
Mental Retardation										
Orthopedic Impairment										
Serious Emotion Disturbance										
Sight Impairment										
Speech Impairment										
Other										
SUBTOTAL										
DISADVANTAGING CONDITIONS:										
Academic										
Economic										
SUBTOTAL										
TOTAL										
English as a Second Language/Bilingual										

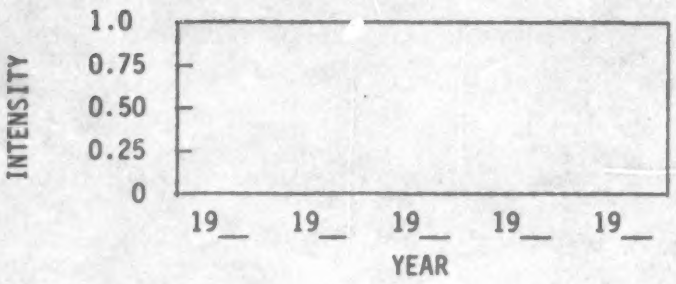
TABLE 20A

Utilization Intensity* of Space Dedicated to the Program

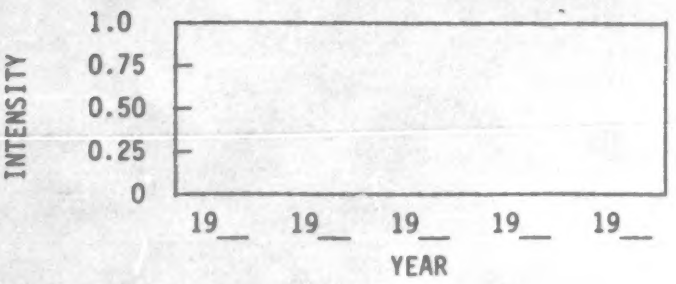
Location_____ Type_____



Location_____ Type_____



Location_____ Type_____



* Intensity of Utilization = (Total number of students using location each hour per week) ÷ (Total number of stations in location X Total number of hours in school week)

APPENDIX D

STUDENT FOLLOW-UP SURVEY FORM

APPENDIX D

(Name of School)
(Address of School)
Student Follow-Up Survey Form

Identification Number: _____. (This I.D. Number is to keep your identity confidential. Your name will never be associated with the information you give below.)

Please answer the following questions by placing an "X" in the appropriate blank. Fold the questionnaire so that the return adress is showing and mail. No stamp is needed.

1.1 What is your current education status? (Check one)

____ Currently attending school full-time

____ Currently attending school part-time

____ Currently not attending school

1.2 If you are currently attending school, what are you studying? _____

2.1 What is your current employment status? (Check one)

____ Employed (includes all employment, even if below your qualifications; does not include full-time military service.)

____ Full-time military service

____ Unemployed (not employed, but actively seeking employment.)

____ Not in labor force (not employed and not seeking employment because of choice, illness, full-time student status, retirement, pregnancy, or other such reason.)

(Note: If you are currently employed, please answer the remaining questions. If you are not employed, please go on to question 3.1.)

2.2 Please provide the following information on your present job:

PRESENT JOB INFORMATION

Job Title _____

Job Duties _____

2.3 Will you permit _____school to send a questionnaire to your employer asking how well this school prepared its students for their work?

____ Yes ____ No

2.4 If yes, please provide the following information:

_____

Name of Company or Firm (If self-employed, please write "self")

_____

Company or Firm Mailing Address

_____

City State ZIP Code

2.5 Your Immediate Supervisor

_____

Last Name First Name Middle Initial

2.6 What is your current salary? $_____ per _____ (hour, week, month, year)

2.7 How many hours per week do you work? _____ hours per week.

3.1 If you are not available for employment in the area of your training (Auto Mechanics), which of the following best describes the reasons? (Check only one)

_____ I became disabled and cannot do this type of work.

_____ I was unwilling to move to a new locality to take an available job.

_____ I am continuing my schooling.

_____ My marital status changed, causing me to forego a new career.

_____ I took the Auto Mechanics program for personal enrichment, avocational, recreational purposes (not under GI Bill).

_____ Other (please describe: _____

_____).

Thank you very much for your cooperation.

APPENDIX E

EMPLOYER SURVEY

APPENDIX E
(Name of School)
(Address of School)

EMPLOYER SURVEY

Identification Number: _____ (The purpose of this I.D. number is to keep your identity confidential. Your name will never be associated with the information you give below)

Please complete all questions on this form even if the person named in the letter no longer works for your firm. Please have a supervisor familiar with the work of the employee fill out the questionnaire.

Please indicate your rating of the vocational training received by the employee as compared with other workers in the same group. If the employee is the only one doing this work, please compare the work with previous employees or with your expected work standards.

		Has all of skills needed	Has most of skills needed	Has many of skills needed	Has few of skills needed	Has none of skills needed	Not Observed
1.1	Enginge Tuneup	5	4	3	2	1	0
1.2.	Engine Overhaul	5	4	3	2	1	0
1.3	Electrical System	5	4	3	2	1	0
1.4	Fuel System	5	4	3	2	1	0
1.5	Lubrication and Oil	5	4	3	2	1	0
1.6	Cooling System	5	4	3	2	1	0
1.7	Change, Repair, & Balance Tires	5	4	3	2	1	0
1.8.	Align Wheels and Repack Front Bearings	5	4	3	2	1	0
1.9	Manual Transmissions	5	4	3	2	1	0
1.10	Automatic Transmissions	5	4	3	2	1	0
1.11	Exhaust System	5	4	3	2	1	0
1.12	Brake System	5	4	3	2	1	0

		Uses all safety procedures	Uses most safety procedures	Uses many safety procedures	Uses few safety procedures	Uses no safety procedures
2.1	Safety procedures	5	4	3	2	1

		Very high productivity	High productivity	Good productivity	Low productivity	Very low productivity
2.2	Work quantity	5	4	3	2	1

		Very Positive	Positive	Neither Positive Negative	Negative	Very Negative
2.3	Work attitude	5	4	3	2	1

3.1 To what extent is the above named former vocational student prepared to perform the job in relation to other employees <u>without</u> vocational training?

_____ No basis for comparison

_____ Vocational student is better prepared

_____ About the same

_____ Vocational student is less well prepared

Thank you for your cooperation.

APPENDIX F

STATEWIDE EVALUATION SYSTEM FOR VOCATIONAL EDUCATION: GUIDELINES*

* Oregon State Department of Education (Discussion Draft, July 21, 1978)

The method of computation can best be explained by example:

EXAMPLE

Criterion / Standard	Additional Support Needed: 1 Critical	2 Large	3 Some	4 None	0 NA	Visiting Team
1. Quality of Instruction						
Relevance:						
1.1 Written statement of measurable or observable student outcomes	X					
1.2 Emphasis on student performance		X				
1.3 Relevant to employment opportunities			X			
1.4 Relevant to employment requirements			X			
1.5 Use of community resources				X		
1.6 Apparent student satisfaction with program as preparation for employment				X		
Curriculum and Instruction:						
1.7 Precise measures of student progress		X				
1.8 Instruction adapted to varying levels of students' abilities	X					
1.9 Curriculum evaluated regularly			X			
1.10 Instruction given in occupational safety				X		
1.11 Pertinent, useful materials		X				
1.12 Program designed to lead to entry employment of upgraded status	X					
Means:						
1.13 Employer participation, planning/conducting instruction		X				
1.14 Advisory committee involvement				X		

Total $\frac{36}{14}$ = 2.6 Assessment Value

1. Multiply the number of checks per column by the number at the top of the column and total.

   3 x 1 = 3
   4 x 2 = 8
   3 x 3 = 9
   4 x 4 = 16
   36 Record total in the space provided.

2. Divide this total by the number of standards rated and record the quotient in the space provided for determining the criterion assessment value:

   (Divide) total $\frac{36}{14}$ = 2.6 Assessment Value

3. If check marks appear in the Not Applicable column, subtract the number of check marks from the denominator; e.g., if two check marks appear:

   Total $\frac{36}{14.2}$ = 3.0 Assessment Value

4. Assessment values for each criterion are then transferred to the assessment value profile chart on the last page of the Self-Evaluation Instrument.

The Visiting Team column is optional; if used, s = same rating, + = higher rating, - = lower rating, 0 = not rated.

SUBSYSTEM ONE. PLANNING AND OPERATIONAL PROCESSES

Self-Evaluation Instrument*
(Complete one form for each Vocational Education Program)

Vocational Education Program Title (No.) _____ Date of Evaluation _____

Community College _____

USOE Code _____

ASSESSMENT VALUES - ASSESSMENT VALUE PROFILE

Assessment values for each Section 1 through 5, are derived for each facet of the evaluation based on program criteria and standards. Once the specific program standards have been applied to measure program effectiveness, a numerical quantity is computed and recorded on an assessment value profile chart. This chart, when completed, provides a readily visible graph or plotting of the vocational program condition and indicates areas where particular emphasis might be placed for improvement.

Assessment values for Sections 1 through 5 should be based upon considered judgment of the condition as it now stands. Such judgments should define the degree to which time, attention, and resources have been devoted for insuring that the occupational education program is meeting the school's or community college's aims and objectives, as well as the needs of students, the labor market, and the occupational education process itself.

Assessment values for each criterion and standard should be consistent with the definitions provided below. Both quality and quantity of past performance should be considered when assessing each standard. Assessment values should be determined based upon the conditions of the program at the time the evaluation is made.

Definitions of assessment values are as follows:

4 - No Additional Support Needed: Indicates that adequate time, attention, and resources have been assigned for conditions or operations to be adequate and functioning well.

3 - Some Additional Support Needed: Indicates that some additional time, attention, and resources would need to be assigned for conditions or operations defined by the standard to be adequate and functioning well.

2 - Large Amount of Additional Support Needed: Indicates a great deal more time, attention, and resources would need to be assigned for conditions or operations defined by the standard to be adequate and functioning well.

1 - Need is Critical for Additional Support: Indicates that it has not been possible for time, attention, and resources to be assigned for conditions or operations defined by the standard to be adequate and functioning well.

*Adapted from Self-Evaluation Study for Evaluating the Occupational Education Program and Occupational Curriculums at Clackamas Community College.

0 - Not Applicable: Indicates that the standard is not applicable given the aims and objectives of the vocational education program.

Quantitative values are placed upon evaluative criteria by assigned numerical quantities 0, 1, 2, 3, 4, to each standard and averaging them for each criterion measurement.

DERIVATION OF ASSESSMENT VALUES

Each assessment value indicates the degree to which time, effort and resources have been devoted to meeting a criterion. This value is computed in the same way for each criterion in Sections 1 through 5.

SELF-EVALUATION

ASSESSMENT VALUE PROFILE

INSTRUCTIONS:

1. Transfer assessment value of each criterion to profile by placing a dot in the appropriate value location.

2. Connect dots to derive assessment value profile.

Assessment Value Profile

Criteria	1 Need is Critical	2 Large Amount Needed	3 Some Needed	4 None Needed
1. Quality of Instruction				
2. Availability of Instruction				
3. Guidance, Counseling, Placement, Follow-up				
4. Facilities and Equipment				
5. Staffing				

INTERPRETATION OF ASSESSMENT VALUE PROFILE

Points which fall to the left of the vertical dotted line in the profile indicate areas to which primary consideration for additional time, effort and resources should be given. Establishing priorities will be particularly important if available resources are limited. (Placement of the dot in the profile illustrates the 2.6 assessment value derived in the example on A 18.)

USES TO BE MADE OF THESE DATA

(The community college should furnish a brief narrative here indicating conclusions drawn from the data, recommendations and plans for use of the data continue on additional pages.)

Criterion
1. Quality of Instruction
Standard

	Additional Support Needed					
	1 Critical	2 Large	3 Some	4 None	0 NA	Visiting Team
Relevance:						
1.1 Written statement of measurable or observable student outcomes						
1.2 Emphasis on student performance						
1.3 Relevant to employment opportunities						
1.4 Relevant to employment requirements						
1.5 Use of community resources						
1.6 Apparent student satisfaction with program as preparation for employment						
Curriculum and Instruction:						
1.7 Precise measures of student progress						
1.8 Instruction adapted to varying levels of students' abilities						
1.9 Curriculum evaluated regularly						
1.10 Instruction given in occupational safety						
1.11 Pertinent, useful materials						
1.12 Program designed to lead to entry employment of upgraded status						
Means:						
1.13 Employer participation, planning/ conducting instruction						
1.14 Advisory committee involvement						

	Additional Support Needed					
	1 Critical	2 Large	3 Some	4 None	0 NA	Visiting Team
Criterion 2. Availability of Instruction Standard 2.1 Offered regularly and/or available as needed 2.2 Minimum Prerequisites 2.3 Open entry, open exit 2.4 Free of sex or minority discrimination 2.5 Local or computer access 2.6 Articulated to other courses and other levels of schooling 2.7 Offered in community settings other than school or college 2.8 Entry by application and/or exam 2.9 _____ 2.10 _____ 2.11 _____						
Total _____ = _____ Assessment Value						
Criterion 3. Guidance, Counseling, Placement Follow-up Standard 3.1 Communication open and active among instructor, employers, employment agencies and guidance personnel 3.2 Occupational and labor market data available to students 3.3 Counselor/student contact frequent and helpful 3.4 Student follow-up surveys on regular basis 3.5 Feedback from follow-up surveys used to modify program 3.6 Feedback from follow-up surveys used to assist former students 3.7 _____ 3.8 _____ 3.9 _____						
Total _____ = _____ Assessment Value						

	Additional Support Needed					
	1 Critical	2 Large	3 Some	4 None	0 NA	Visiting Team
Criterion 4. Facilities and Equipment Standard						
4.1 Comparable to facilities and equipment in actual working conditions						
4.2 Adequate for the number of students enrolled						
4.3 Adequate to promote individual learning						
4.4 Schedule and funds for addition or replacement provided for						
4.5 Adequate safety devices						
4.6 Adequate space for instruction						
4.7 _____						
4.8 _____						
4.9 _____						
Total _____ = _____ Assessment Value						
Criterion 5. Staffing Standard						
5.1 Instructor has adequate preparation in content of the courses assigned						
5.2 Instructor has had adequate preparation in teaching methodology						
5.3 Instructor has had successful work experience in this occupational area						
5.4 Instructor participates in relevant inservice training						
5.5 Teacher/pupil ratios adequate to promote individual learning						
5.6 _____						
5.7 _____						
5.8 _____						
Total _____ = _____ Assessment Value						